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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

BRIGHT'S DISEASE; PATHOLOGY AND TREATMENT.

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According to the monthly reports of the National Board of Health, this malady prevails in country and town, affecting males more than females, at an advanced period of life; indeed, it may be said that granular degeneration of the kidneys is a common disease as life advances. Dr. Mahomed has published a table which shows that in persons dying from all causes, above the age of 50, 62 in 150 have granular kidneys. On shipboard it is rare, because, perhaps, the crews, especially of naval vessels, are recruited and picked men; the officers are not so exempt. For several years past no single neighborhood in the rural portions of Virginia has failed to present examples of the disease in both sexes; the drinking of ice water during the entire year, and of alcoholic stimulants, are considered to predispose to this affection.

For convenience, the subject will be treated under two heads, viz.: First, or the acute form—diffuse nephritis, where the kidney is large, weighing eight to twelve ounces. On section the cortical portion is thick, pale and anæmic, and marked with yellow spots, and the epithelium of the tubes is infiltrated with an albuminoid, granular substance. Hyperæmia is a prominent feature, with congestion of the kidney, which weighs twice or even four times as much as in health. The cortical portion is twice its ordinary thickness. In an excellent monograph, by I. F. M. Geddings, M.D., of Charleston, S. C., "the contents of the tubules are described to be completely converted into detritus, and removed partly by absorption, and in part conveyed away by the urine, and the Malpighian corpuscles are contracted and in a condition of sclerosis. The granulations vary from the size of a millet seed to that of a small pea. The essential character of the disease the learned author considers to be a morbid deposit in the substance of the kidney, attended by an abolition of function, with atrophy of the healthy structure of the gland, the presence of albuminuria, diminished specific gravity of the urine, an altered state of the blood, and dropsical effusion."

The symptoms resulting from the above pathological changes are those of acute nephritis: General ill health, dyspepsia, dyspnœa, palpitations of the heart, frequent micturition, imperfect vision, slight fever, trouble the patient for a long while, and for the relief of which, in the majority of cases, he will resort to empirical remedies.

Second or chronic stage, parenchymatous nephritis: the epithelium of the cortical tubes is thickened and infiltrated with an albuminoid substance in the form of granules, which later are replaced by molecular fat and oil globules. The specific gravity of the urine is considerably diminished, falling from 1.010 to 1.005, with an excess of albumen and deficiency of urea, the latter being detected in the blood. The albumen, which in healthy blood is 65 in 1000, in this disease is reduced to 16 parts. The urine, which amounts in health to 40 ounces in 24 hours, in this disease the patient voids only 12 to 16 ounces.

Examples, however, occur in the advanced stages, in which the quantity of urine is not below the standard of health. The red corpuscles of the blood are sometimes reduced to one third of their normal proportion, and the skin assumes a weaker, cadaveric color, due, it is supposed, to a lack of vigor in the assimilative processes. In the midst of the congested parenchyma is a granular mass, impervious to the finest injection; the outer surface is pale and rough to the touch. The natural structure finally disappears, through absorption, by pressure of the new deposit. Charcot, on examination with the microscope, found the changes to be localized in the convoluted tubes; "the tubules are blocked by the deposit of fibrine plugs, and the color of the kidney is yellowish and gives to the organ a granular appearance." The effect upon the urine is claimed to consist in the diminution of its quantity, in the presence of albumen, and in the deficiency of urea and saline matters, in consequence of which the serum of the blood with its albumen passes readily, while the saline matters and urea are checked. Dropsy is an associated disease, and when present with the symptoms of granular degeneration of the kidney, there can be no further doubt as to the nature of the affection. An anæmic condition accompanied by organic disease of the heart and lungs are sure precursors of a fatal result. Out of 100 cases recorded by Dr. Bright, there were only 27 in which no cardiac disease could be detected; in 52 there existed hypertrophy; in 18 valvular disease, and in 11 the aorta was affected, all of which were considered to be due to the existence of anæmia.

The chronic vomiting which attends the closing scene he refers to the cardiac affection, and is merely functional. In a late number of the *Lancet*, Robert Sandys, M.D., discusses the influence of Bright's disease in developing latent valvular disease of the heart, and assumes that a common cardiac lesion is dilatation attended by a systolic mitral murmur, succeeding an attack of rheumatic fever." This author further asserts "that chronic Bright's disease is a cause of atheroma of the aorta and of the aortic valves."

As in the acute stage, so also in the chronic, the true nature of the disease may, for some time, be undetected. An early symptom of chronic Bright's disease is amblyopia and other derangements of vision, along with obscure lumbar pains, and pallor of the complexion, presenting a peculiar, ashy whiteness; the features appear blighted and the hair changes its natural color to the premature hue of old age, which, with the existence of tube casts and albumen in the urine, may be assumed to be invariably pathognomonic of Bright's disease. Here it may be added that the proper method for testing the urine, *e. g.*, with heat, if the phosphates are suspected to be present with albumen, nitric acid should be added to redissolve them. If the urine be alkaline, heat will fail to coagulate the albumen, unless the alkalinity be removed by a few drops of acid.

Treatment.—The fact that congestion and hyperæmia of the kidneys, with severe pain, and fever in the acute stage of granular degeneration exist, would be suggestive of the judicious use of local depletives to the lumbar region, dry or wet cups, anodynes, and active but not drastic purgatives; for example, the solution of citrate and bitartrate of potash combined with a few drops of dyalised iron. Active medication is not so important as attention to diet; rest, healthful recreation, and travel, and what is now esteemed to be a sine quo non, prompt resort to suitable mineral springs or the use of the waters which have proved by experience to be beneficial if not actually curative.

By way of illustration of the treatment of the chronic form of Bright's disease, the following details of a case successfully treated may be given: Dr. Henry Frost, late of Charleston, S. C., invited me to a consultation with him. The patient was a man of 50 years old, the son of a physician, in early life was thriftless and dissipated, and for several years past had complained of general ill health, dyspepsia, shortness of breath, and palpitations of the heart. During the spring of 1881 he suffered from an attack of nephritis. On examination the urine was found to contain albumen. For this affection he had been appropriately treated by Dr. Frost. In the month of June the cardiac distress was increased, œdema of the eyelids and right leg was observed, accompanied by nausea, severe pain in the hypogastrium, diplopia and slight amaurosis. Six weeks later there was general dropsy of the abdomen and inability to lie down. Epsom salts, ℥ iss, dissolved in a quart of water, in the quantity of a wineglassful, was administered three or four times daily; also

℞. Fluid extract jaborandi, gtt. x
Tinct. digitalis, gtt. xv.
Ter die.

The fluid extract jaborandi caused nausea and was suspended. Emulsio balsam copaiba and tolu, with muriated tincture of iron, were substituted for it, and continued for several weeks. The dropsical fluid was discharged from the legs, after acupuncture, by the gallon, during his illness, and painful

sores and hemorrhoids contributed to the distress of the patient; nor did he escape from the dangers incident to so serious a disease and its complications. At times was delirious and comatose, and presented all the symptoms of uræmic poisoning. He was rescued more than once by the prompt use of large quantities of alcoholic stimulants, and careful nursing day and night. His diet was skimmed milk, fresh meats, fruits, etc., especially grapes, and the use of Buffalo Lithia water, from spring No. 2. Under this treatment the dropsy of the abdomen, legs and face began to disappear. The patient was then given "alum and iron mass," prepared by Landrum & Litchfield, druggists of Abingdon, West Virginia. This salt was given with reference to its tonic and astringent properties, and contributed to improve the digestion, to promote absorption, and to restore the properties of the blood. By the month of October this patient recovered sufficiently to travel and visit a brother residing in the city of Richmond. There he was submitted to the care of Dr. W. B. Gray, who instituted, I am informed, the following treatment, for the sequelæ of the case:—

℞.	Rad. scillæ,	ʒ ij
	Tart. ant. and potass.,	gr. j
	Potass. sulphatis,	ʒ ss
	Potass. bitartratis,	ʒ iss.

Teaspoonful three times daily.

For the relief of the cardiac symptoms—

℞. Tinct. veratri, gtt. iv

ter die, was also ordered. He was also advised to use the waters obtained from the New Kent mineral springs, containing lithia; they are generally prescribed by the physicians in Richmond.

During the month of November this patient returned home, his dropsy entirely cured and not a trace of albumen in the urine. At the present time, on careful physical examination; he may be pronounced relieved. His complexion, appetite and strength mark the well man. The urine has resumed and retains the healthy character, is normal in quantity and specific gravity.

For the encouragement of such a patient, the opinion of G. B. Wood, M.D., "Practice of Medicine," may be quoted: "I have a distinct recollection of two severe cases of inflammatory dropsy, with strongly coagulable urine, of which one occurred nearly twenty and the other thirteen years since, and both perfectly recovered without subsequent relapse." Other later and eminent authors are of the opinion that dropsy dependent on Bright's disease is prone to recur.

THE INNOVATIONS OF MEDICAL AND SURGICAL PRACTICE.

BY J. M. F. GASTON, M.D.,
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(*Concluded from p.* 201.)

This naturally brings up the mooted point of the "survival of the fittest" ligatures, as, after all the experiments of silk, metallic, catgut and caoutchouc loops for securing arteries and pedicles, there seems to be a tendency to settle down upon the silk ligature as affording all the requisite conditions for security and freedom from undue irritation, with a remote prospect of final absorption. It is calculated to puzzle the inquirer after the stable and trustworthy in surgical appliances, to note the vacillation of high authorities in regard to this apparently simple practical selection of a ligature; and while it is commendable to try all and hold fast to the best, we cannot, if we would, forget the splendid tribute of Dr. J. Marion Sims to the silver wire ligature, in his address, some twenty five years ago, before a distinguished audience in the city of New York, upon his first presentation of his improvement in operating for vesico-vaginal fistula to the medical men of that city.

His claims for this mode of ligation have not been belied by subsequent experience; and it is a matter of surprise that with its invariable good results and its capacity to remain encysted in any order of tissues, there should be a disposition manifested to abandon it for the doubtful recourse of other means. I recall vividly the fact of testing the silver wire suture about the time it was brought so prominently to the notice of the profession, in reuniting the tract of the small intestine after three pieces of eight or ten inches had been cut away, by a man under the influence of delirium tremens, in Columbia, South Carolina, and the happy result in saving the life of the would-be suicide, the perpetrator of this act of desperation. Since that time it has been used by hundreds, and even thousands, with like salutary results, in all varieties of cases, without disappointing their legitimate expectations in a single instance.

As the applications of elastic ligatures are thus far limited to special conditions, and for the most part to effect temporary constriction, this mode of ligation may be considered *sub judice* on the part of surgeons. It is an innovation that promises to accomplish what none of the others can claim to do, in affording a steady and graduated compression upon the included tissues, without risk of laceration or cutting the texture of such parts. If we are to accept the high au-

thority of Olshausen, the elastic ligature, "when left in the abdomen, after having buried itself deeply in the tissues, becomes encapsulated and harmless." Others have applied it to the pedicle after the excision of various parts, and with invariable good result; so that its extension to the ligation of large vessels generally seems to be warranted; and it may be inferred that a simple elastic ring should prove adequate to the necessary constriction of the umbilical cord, thus obviating a not infrequent accident of secondary hemorrhage from the cutting of its soft substance by the ordinary mode of ligation.

The caöutchöuc tube presents special advantages in cases requiring a uniform compression; yet the round solid cord or flat strips of this material are applicable in a great variety of circumstances demanding a ligature, and if we can rely upon the tolerance of the vital organization for retaining this vegetable substance without giving rise to any irritation or suppuration, the application of the elastic ligature to the arteries in amputations admits of the flaps being closed up at once throughout their entire extent, thus securing complete occlusion.

That restless desire for change has led to multifarious trials of other materials, yet it is, of all, perhaps the very best thing which can be left in contact with the susceptible tissues of the human organism in the form of suture or ligature.

If Mr. Bryant's recommendation of torsion of arteries, without ligation, is sustained by more enlarged experience, the arrest of hemorrhage is settled for all time, and it should be hailed as the greatest advance in modern surgery.

This simple process has long been applied to small arterial twigs when divided in the course of an operation, but this bold proceeding of arresting the flow of blood from a large arterial trunk, such as the femoral, and relying upon torsion alone to secure the closure of the vessel is, so far as I am informed, a novelty, whose reach can only be appreciated by those who know the real difficulties connected with the application of ligatures to the main trunks of the arteries. It is claimed, and sustained by reference to cases, that when the proper tissues of the artery are twisted eight or ten circuits upon its own axis, no blood will be lost, either primarily or secondarily, and that there is no sloughing of the extremity upon which torsion is thus executed.

In view of the representations as to the favorable results of this process in the hands of Dr. Bryant, it would seem that surgeons are authorized to put it into practice; yet it should be used with all the conditions and precautions under which it has been performed by that distinguished operator; and it is especially inculcated that the artery shall be detached from its surrounding investment, and drawn out, preparatory to twisting the extremity. Should this be done in a bungling manner, and serious consequences ensue, it would bring discredit upon the operator, and I take it that any one undertaking this process upon the femoral should not only be especially careful in the observance of the details in performing it, but should be extremely watchful of the case for several days subsequently; watch and wait, in faith.

The transplanting of tissues is no longer limited to removal of the skin from one part to another of the same individual, or from the living body of one individual to that of another person; but the skin has been removed from the dead body several hours after life was extinct, and transferred to a living being, with reproduction of vitality in that portion of the cutaneous investment so transplanted. It has likewise been demonstrated that ossific matter may be engrafted upon the bony structure, being taken from the same or a different individual. Thus deficiency of bone has been supplied, and it is within the scope of surgery to replace segments of necrosed shafts or to supply the substance that may be lost in resection of the bones of any part of the body. Artificial joints, resulting from degeneration of ossific deposit in cases of fracture, have thus a reasonable prospect of relief, maintaining the entire length of the member; and in like manner it may be anticipated that the aperture of the cranium resulting from the operation of trephining may be closed. If the cutaneous substance can be taken from a dead body, as has been demonstrated, and regain its vitality by contact with living parts, there cannot exist any insuperable difficulty in the transfer of a section of bone from the head of a decapitated culprit or from one that is hanged, to the cranium of a living subject, so as to fill up a vacancy that may exist. The occasion for such an operation may be opportunely selected, as it is not requisite or desirable that it should be done at the time of the trephining of the cranium, but subsequently, when the scalp may be reformed.

The audacity of practical innovation is not exhibited in anything more strikingly than in a case reported by Rosenstein, of Leyden, in which the pericardium was laid open and two drainage tubes inserted into the cavity of the sac, with the restoration of the patient, after four months of this treatment, for a purulent effusion. It was not enough that this investment of the

citadel of life should have been invaded previously by the aspirating needle, but this daring pioneer has ventured upon the far more perilous undertaking of drainage from its cavity, and with a salutary result. It would really appear that surgeons of the present day are actuated by sentiments very similar to those venturesome heroes who, during the last quarter of a century, have been striving to reach the North Pole; and the ultimatum with each is, who can go furthest!

An old idea has been recently revived, with more zeal than discretion, in seeking to supply the deficiency of vital fluid by the transfusion of the blood from one to another, or the introduction of defibrinated blood, milk, or the saline solutions into the veins or arteries, and likewise by the injection of blood into the peritoneal cavity. It has been also gravely claimed that, independent of any lack of blood for the nourishment of the body and the performance of the ordinary vital functions, in cases of mental derangement, the blood of the subject of lunacy may be removed and replaced with healthy blood, with decided advantage to the sufferer, and that the experiments made have given encouragement for their repetition. The absurd denouement of the experiments and deliberations upon the various articles adapted to replace or modify the natural production of the vital fluid is a preference for simply diluting the blood with a saline aqueous solution injected into the venous circulation. Why might not this same end be well reached by filling the colon with the said solution and leaving it to be absorbed, or to effect the desired modification by the process of endosmose and exosmose through the coats of the large intestine, and thus altogether obviate the risks of introducing the fluid directly into the circulation.

The proceeding most in conformity to a natural process for replacing the lost fluid would seem to be that of transfusion from the vein of the arm in the person supplying the blood to a corresponding vein in the person who is to receive it, maintaining the temperature in the passage and securing against any contact with the atmosphere. It is thus and thus only that a removal of the circulating fluid without material modification can be effected; and if it should be my misfortune, by any accident, to lose such a quantity of blood as to endanger the recuperation of my forces, I should risk this in preference to the other measures which have been suggested for replacing the blood. In the transfer of blood from one body to another, there should, of course, be observed all the precautions possible to secure correspondence in the quality of that supplied to that lost or to the remnant for augmentation.

The outstretched arm of aggressive, and if we may so style it, progressive surgery, has laid a violent hand upon the liver, and seized especially upon the gall bladder for a trial of skill and daring interference with its disorders. Although the results thus far have not given assurance of final triumph, enough has been accomplished to embolden others to hope for success, and with the advancements in abdominal surgery, it should not surprise us if dilatation of the ductus choledochus should be effected by an opening into the duodenum; or if this tract should be obliterated, there should be maintained a direct communication of the gall bladder with the intestinal canal by uniting them with sutures after making the requisite orifice in each for the passage of the contents of the gall bladder. We know already that an ulcerative process has accomplished this communication in entire obstruction of the gall duct, and I have good and sufficient reason to believe that a patient of mine has realized this abnormal change, and is now in the enjoyment of a fair measure of health. It must be taken for granted, in this case, that my diagnosis, made while the acute symptoms were present, and given to a colleague who was in attendance with me on the patient, was correct, as there can be no opportunity afforded for verifying it, except by a post-mortem examination. In view of the probability of a restoration of the bile to the alimentary canal, an operation to effect this union promises far better results than the fistulous discharge of the gall bladder externally.

The hydropathic treatment of pneumonia, croup, etc., has been heretofore confined to specialists, but some prominent members of the medical profession, being actuated doubtless by the sentiments of the pastor who declared that the devil should not have all the good music, have experimented and approved the water cure in various affections. With the recommendation of Dr. Austin Flint, and the detailed observations of cases treated in this manner, there cannot be a doubt of the safety and efficiency of the application of towels wrung out of cold water to the chest in pneumonia. We have ample testimony from Germany and other parts, of the advantages of cold baths in fever, and in all cases of elevation of the temperature of the body. This practice is not by any means recent, yet its recognition and adoption by the profession in this country is a novelty, so that it is entitled to consideration under this head of innovations. I have no

sympathy with that hide-bound policy of rejecting any course of treatment, because it has been resorted to by quacks. Let us profit, if possible, by even the rash experiments of the empiric, and cull from the vast field of tares the little sound grain that might be useful to us in treating the "ills to which flesh is heir." The botanic practice of Thompson, though false in theory, brought into notice the properties of some important articles, and among them, the great virtues of lobelia inflata and the capsicum annuum, by which the regular profession has profited vastly. The steam vapor bath and the enveloping in blankets, which were used, or rather abused, by the disciples of the said Thompson, enabled judicious observers to turn to account that part of the practice which proved to be efficacious, so that a benefit was unwittingly thus conferred by these experimenters upon the resources of art and nature without regard to science.

We must not even ignore the negative results of homœopathy in leading to a just appreciation of the vis medicatrix naturæ, and hence to the adoption of the expectant masterly inactivity in some forms of disease. This delusion is simply the shadow of nothingness, and should rank in the scale of curative means not as zero, but really as "naught without the rim," or as a minus quantity in the estimate of resources in the treatment of any disorder of the human organism. How it has happened to have adherents among intelligent people is totally incomprehensible, except upon the principle that "if it does no good, it does no harm to the organization, and serves as a toy to tickle the fancy.

The prevailing spirit of active interference in the practice of medicine, and of operative procedure in surgery, needs, perhaps, to be somewhat curbed by a little patient watching of symptoms, and we have learned, by the manner in which "diseases drag their slow lengths along," under the time serving ordeal of expectancy, that no serious trouble ensues from some disorders by this delay in the application of energetic means of treatment. This course could not be applicable to all cases, as there are diseases which exact the earliest and the most stringent measures to arrest their development. This aggressive policy recommends itself whenever the way is clear for action, and whatever our hands find to do we should do it with all our might. Caution in diagnosis and boldness in practice are the watchwords of the intelligent physician and surgeon, and generally lead to success. The axiom of Napoleon, that providence was on the side of the big guns, denuded of its sacrilege, is eminently applicable in the treatment of all diseases which require interference, and the doses of medicine or the extent of cutting should be proportioned to the gravity of the evil to be remedied. Risk of killing a patient by medicine or with the knife is sometimes warrantable, rather than leave him to a certain fatal end by disease; and the physician or surgeon who fails to afford the only relief that is practicable, through apprehension of the judgment of bystanders, is justly chargeable with neglect of duty. Let us suppose that we have a case of intussusception that is clear and well defined, which has resisted all the medication possible, with the certainty of a fatal termination if not speedily relieved, and what is indicated in view of the advances made in our resources at the present day? It is beyond a question that the abdomen should be opened, and the site of the occlusion being ascertained, an attempt should be made to withdraw the part of the intestine that is confined by the exterior portion; and this being impracticable, from adhesion or from the closeness of the stricture, excision of the segment should be resorted to, and the free ends united by silver wire sutures in the margins. Death may ensue, notwithstanding this is done with every possible precaution; yet death must certainly occur without it, and we should give the patient this chance of escape. The fatal procrastination in deferring this procedure until such vital depression has resulted as to preclude restoration, is certainly culpable; and hence in this, as in strangulated hernia, delay is always a dangerous practice. To perform an operation upon a moribund subject can rarely ever be justifiable; but when, by a timely resort to the knife, we choose the less of two evils, it is commendable to literally cut the Gordian knot.

This principle holds good in all branches of practice; and we thus endorse the sentiment that the "bravest are the tenderest;" for it is a true regard for the welfare of the sufferer which actuates the operator in such a case.

In critical conditions critical remedies should be resorted to, both by the physician and by the surgeon; and no half-way measure of compromise is suited to the circumstances of gravity which are threatening the life of the patient.

Should it appear that the heroic interference which characterizes the practice of some of the medical profession in this progressive age is rashness, I venture the assertion that before the close of the nineteenth century the daring intrepidity inspired by further investigation will have so far outstripped anything yet accom-

plished, as to cause the advances of to-day to appear tame, from over caution in executing what is imperatively demanded in emergencies; and cautious boldness must triumph over disease.

The lesson to be learned from this desultory consideration of the present status of practice in the medical, surgical, gynecological and obstetric departments, is that of encouragement in ascertaining the capacities of the human organization to admit of the requisite explanations of its disorders, and to submit to the curative processes which are indicated for their correction. The extravagances of novel measures of treatment will ere long disappear, under the crucial test of experiment; and careful investigation should confirm the tentative expedients which have been dictated by a proper appreciation of surrounding circumstances. Statistics must furnish the mirror in which the profession shall discover the defects of erroneous theory and injudicious practice, so that with elaborate reports of cases treated, we have a sure guarantee against vicious proceedings for the future. With the initiation so conspicuous in the recent developments of thought and action, it devolves more than ever upon observers to record the results which are presented, and especially is it incumbent upon those entering new fields of inquiry to note minutely all the data of the preliminary condition, progress, termination and consequences of the disorder. The antecedent and subsequent state of a patient are important elements in the study of a disease, and of still greater moment in the history of a surgical operation. If these off-hand comments upon passing events seem to attract the attention of the profession to the necessity of due circumspection in all things, the end in view will have been attained.

Hospital Reports.

COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINIC BY ALONZO CLARK, M.D.,
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Bright's Disease.

First patient, a male, about fifty years of age. He states that he has been confined to the house about four months; that he has to stagger from one place to another across the floor, but that he is better now. The feet are swollen; much less, however, than they were previously. He prefers to lie on the left side at night, which may account for the fact that the left leg is swollen more than the right. The leg pits deeply. He also complains of having pain in the back. This symptom, with the weakness in the limbs which he complains of on walking, would suggest spinal disease. I have known persons with the legs considerably swollen. They could walk well enough, but when they got on the bed they could not lift their legs up. This patient says such has been his case also. That, probably, is the explanation of his awkward movement, especially as he has had no paralysis anywhere else. It is true he thinks the sensation in his legs is considerably diminished, but when I pinch him he grumbles.

Then the question is, what is the cause of the swelling of his legs? That is the most marked feature of his case. The answer naturally is, kidney disease; but Dr. Wheelock informed me that he examined the urine and did not discover albumen. That may be; for persons sometimes come to me saying they have Bright's disease, been so called by their family physician, and I examine the water and find no albumen. I do not conclude that they have not Bright's disease, but continue to examine it every second or third day for three or four weeks, because I know the microscopic, the chemical and the clinical symptoms are often absent for two or three weeks in a case that is really confirmed, and then will come again. The fact, therefore, that no albumen has been found in the water is by no means conclusive, especially when we have the evidence of the œdema. The œdema has been confined mostly to the legs and feet; he says he has not had any swelling of the hands.

There is an early sign of coming œdema that is, however, fallacious as a distinctive sign. I refer to the tear line. A little œdema will come on the conjunctival membrane of the lower lid, and pressing the lid against the eye, will force it up on to the top of the lid, and it will then have a little wire appearance, or the appearance of a small thread running along the lower eyelid. This patient has that. There is a little œdema of the conjunctiva elsewhere also. It goes away when you lift the lid, but comes again immediately after. He says there has been no enlargement of the abdomen.

He has had trouble in going up stairs during the last week or two, but it seems to have been due principally to the condition of his legs. He says he does not get out of breath except on some exertion.

We will examine his chest and abdomen. The fact that he prefers to lie on the left side is rather evidence against cardiac disease. Persons who have much of that trouble are very apt to lie upon the right side or back. I do not get any signs of valvular lesion about the heart, although there is a little hypertrophy of that organ. There is no pain in the chest. There is dullness behind, over the lower portion of the thoracic cavity, indicating a little fluid in either pleural cavity. There is, you will observe, some œdema of the face and swelling under the eyes.

I think this is an instance in which it is safe to infer that there is some trouble with the kidneys, and that, at the present time, conclusive evidences are not apparent, but perhaps a week hence it will be different.

With regard to the treatment in such a case, the great point is to keep himself warm. If he

is obliged to go out in cold weather, he should protect himself with an abundance of clothing. If he is not obliged to go out, it is better, in cold weather, to keep in the house. I have kept such patients in the house all winter, and directed them to keep the temperature of their part of the house at 72° F., night and day. Not so particular at night, because the bed clothes will protect them, but it is better to have it uniform. This man cannot do that; he will have to protect himself as much as he can in cold weather by clothing. A steam bath is a very excellent thing, to be taken twice a day, and anybody can arrange a home apparatus for that purpose. It may be prepared by taking a tin can that will hold a couple of gallons of water, covered with some utensil; put a tube in the dome of it; connect with this tube another one, six feet long, having an angle, which will convey the steam to the wooden chair on which the patient sits while covered with blankets, fastened about the neck. In a few minutes the patient will begin to perspire, and this may be kept up say twenty minutes or half an hour, when he should be well rubbed off, and if it be in the evening, as I generally direct, he should put on his night clothes and go to bed. If he sweats a little after that, all the better. Then in the morning before he gets out of bed, he should be rubbed thoroughly with a dry flannel so as to stimulate the circulation. That stimulation of the circulation of the skin with dry flannel or some agent that is equal to it should be practiced every day, whether he takes the bath or not the night before. I was in consultation near here some years ago, and it was agreed that to sweat the patient was desirable, and we were devising a plan by which it could be carried out when the nurse asked what was wanted. It being explained to her, she said she could do that. Boil a peck of potatoes; wrap them in a cloth and lay them close to the body. She did so, and it worked very well. It is often the case that bottles of water, not exactly hot but pretty nearly, are enveloped in damp cloths and laid alongside the body. The œdema will sometimes disappear on the use of these steam baths, but commonly it is necessary that some diuretic be used to accomplish that. All effusions that are observable in the body are easiest carried off by the kidneys, disturbing the system less than if carried off by any other emunctories that are capable of doing it.

For him, probably, as good a diuretic as any that can be prescribed is the sal diureticus, the acetate of potash, twenty grains every two hours, in water; and the infusion of digitalis, commonly a dessertspoonful, or two drachms, will be enough, taken three times a day. He cannot conveniently take it with the salt, because he takes that every two hours.

Facial Paralysis.

Case 2.—This man complains of a disfigurement of the face. He works by night and sleeps by day, and about two weeks ago, having gone to bed perfectly well, he awoke, and observed that the right side of the face was paralyzed. The right eye watered. No pain was felt, but the face appeared disfigured.

This kind of deformity, paralysis, often comes of inflammation of the theca of the seventh nerve, the portio dura, and in that case leeches are the quickest remedy that we can use, applied as near to the source of the nerve as can be done; but in this case there is no tenderness at all. I press pretty hard, to the extent of a couple of pounds weight, and he says it does not hurt him any. This is not a very uncommon affection, and it generally comes just as in this man's case; it comes in the night, and I think it is more likely to occur if there is a draft of air upon the side of the face corresponding with the paralysis. Many of these cases will be relieved without any remedy in the course of four, five or six weeks. In others it is of very considerable duration; indeed, in some it is not relieved at all, being carried for years. Relief, when it is effected, is obtained from various sources; sometimes from electricity. Medicine, I think, has no power over it at all; at least I know of none. As just said, electricity seems to be remedial in certain instances. Dr. Detmold, some years ago, invented a little electrical apparatus which he thought would act well in these cases, and I think it does. It is a compound metal wire, containing two metals that act upon each other in a way to produce electricity. At one end is a hook which goes in the mouth, lifting the angle of the mouth up on the affected side, and at the other end is a hook that goes over the ear. He has the patient wear that continually, except while eating. It is a simple apparatus, and the saliva of the mouth probably aids in making it electrical.

You observe, as the patient smiles, how the face is drawn to the left side. There is no affection of the tongue that I can see. He can chew his food all right on either side. Sometimes the paralysis is so positive that the food will come out of the mouth when he chews with the teeth of the affected side, but it does not seem to do so in this man's case. I see some movement of the muscles of the paralyzed side, as he talks, which seems not to be entirely passive.

Spinal Sclerosis.

Case 3.—Our next patient is a man about thirty-three years of age, who, as you see, has been led into the room by his wife. She says he has been sick about two years; has not been able to walk for about a year and a half. He has cramps; sometimes unconscious four or five hours after the attack. In the attacks the arms and legs are straightened and shake. The hands are clinched, and he attemps to get out of bed; talks, but appears to be unconscious. After the attack he asks what had been the matter, remembering nothing that had occurred.

Some of these symptoms point to epilepsy, while others do not. It is not uncommon that persons after an epileptic attack are really delirious, sometimes for half an hour, sometimes for four, five, or seven hours. She says he is white during the attack, which would not point to epilepsy.

Some days he cannot walk at all, and you will observe that muscular paralysis is plain enough. The next point arises, is there paralysis of sensation. Not being provided with a special instrument to test the sensation, we will take a card that will hold firmly pins stuck through it,

putting the pins two or three inches apart, to begin with, and reducing the distance gradually as we test his sensation.

You will observe that there is no defect in the sensation in his case. We would infer that there is here thickening of the posterior column of the spinal cord and not of the anterior. This is not a very uncommon form of sclerosis. He has not the walk of locomotor ataxia, but his wife's description of his walk formerly corresponds to the walk of that affection. We may infer, then, that he really had locomotor ataxia, and that it is now being converted into paralysis. We have such a patient in the hospital at present, who was treated in a variety of ways, by medicines given internally, until we finally settled down upon the fluid extract of ergot, increasing the dose until he got to taking a drachm three times a day. He continued that an entire year, at the end of which time he was so far restored that he could take the place of orderly about the wards. He has now been in the hospital five years, and some of the Professors show him to the students every year.

Now, as an encouragement in this case I should think the same medicine would give some relief to this man. Dry cups might also be applied over the spine, as it can be done by some one of the family, by burning a piece of paper in a small-sized tumbler, placing four on the back, two on either side of the spine. This, with the fluid extract of ergot three times a day, would be the treatment. I would not start out with a drachm of the medicine, but half a drachm, and see if he bears it fairly. This reminds me that we now have in the hospital a man suffering from dry gangrene of the toe. The pulse is good, and there is no obstruction in the arteries. We learned, after he had been in the hospital a day or two, that he had been eating rye bread; that for years he had eaten it whenever he could get it, and living in the west he could generally get it easily enough. The question presented itself before us whether this dry gangrene was the result of ergot which he got in the rye. In times past, when rye was used a great deal, dry gangrene occurred which was attributed to the rye, not, perhaps, to ergot which it contained, for that was little known until about the time of Dr. Stearns. But I am not sure about the agency of rye bread in this case of dry gangrene of the toe.

Graves' Disease.

Case 4.—Here is a case that you will be interested in. You will observe, first, that there is swelling in the neck. I have not seen her before, but the case struck me in an instant as she entered. Second, there is some degree of prominence, not remarkable, of the eyes. And third, I suppose we shall find the pulse beat at the rate of 120, perhaps beating more rapidly than under ordinary circumstances, coming into a room where there are so many strange faces. But I do not find any pulse beat at all, either at the wrist or elbow. The heart beat, however, is strong enough, and exactly at the rate of 120. The hands are warm enough; I do not know why the pulse cannot be felt.

She has, then, three elements of what is sometimes called Graves' disease, because he described it before anybody else, in the English language. It is claimed for Basedow in Germany, and for Trousseau in France, but Trousseau acknowledges that Graves described it before, so that it is not very wrong to call it Graves' disease. The thyroid gland is swollen, the right side more than the left, in this case. It is a mild case, showing the three characteristic features of it in a limited degree only. Congestion produces these swellings in the thyroid gland and behind the eye. How it should fall out that three parts of the body that are at a considerable distance from each other should undergo the same change, and the intermediate parts not be affected, is a matter difficult to explain. Still, case after case presents itself, though it is a rare affection, and we are obliged to assume that Graves was right in associating the three congestions (he did not explain it, however), and that it makes really one disease.

The patient says her general health is good; she eats well, digests well, has no pain. She does her housework and thinks she is as well as usual.

You ask what would I prescribe? That same fluid extract of ergot, because of its effect upon the capillaries. I would have her begin with twenty drops, increase it to thirty, forty, and perhaps, to fifty, in a week or ten days, and if it works as well as it has done in some of the cases I have seen, she will be improved in a moderate length of time. Speaking from my own experience, it always gets well; but I notice in the records of other persons it does not always. At any rate, there is hope for improvement in this case, as it is not a very well developed one. It has these three features, but none of them marked in a high degree.

Medical Societies.

THE RECENT EPIDEMIC OF MEASLES.

BY J. T. ESKRIDGE, M.D.,

Physician to the St. Mary's and Howard Hospitals.

Read before the Northern Medical Society of Philadelphia, June 23d, 1882.

The severity of the recent epidemic of measles is of sufficient interest to occupy the Society's attention for a short time.

Case 1.—Charlie, aged ten years, moderately strong, suffered from scarlet fever and some of its sequelæ (otorrhœa and renal dropsy) three years ago, and from a moderately severe attack of pertussis attended by bronchitis, with some pulmonary collapse, during January and February of the present year. After this he was quite well until April 21st, when he complained of headache and sick stomach. His temperature at 2 P.M. was 101°; pulse 130 and vibratory; respirations 28 per minute. During the afternoon he felt chilly. His bowels were constipated. Eyes and air passages were in nearly normal condition.

22d. Morning temperature 98°; pulse 96; respirations 24. He did not feel sick, but his pulse was still irritable. Malaria was suspected and he was accordingly treated. I did not see

him the next day, but I learned that he had been feverish during the afternoon.

24 h. Afternoon temperature 102°; pulse 130; respirations 30. The eyes were watery, conjunctivæ injected, nose discharging freely, throat sore and inflamed, and attended by a troublesome cough.

25th. Morning temperature 102.8°; pulse 135; respirations 36. Face quite red, with a scarlet-fever like rash. At 2 P.M., temperature 103°; pulse 140; respirations 40. The pulse was extremely irritable. His throat was very much inflamed and a papular eruption covered the buccal mucous membrane No false membrane formed on the tonsils or fauces, but the parts were of scarlet redness, and so painful that swallowing was difficult. A measley eruption covered the body and limbs. The heart's action was labored, and a systolic murmur was heard at the apex. During the afternoon and evening broncho-pneumonia began to develop, which resulted in partial consolidation of the bases of the lungs. Soon his breathing became rapid, and he irritable and restless. At times, when delirium was most marked, it was difficult to keep him in the recumbent posture. After the cardiac area and the surface over the involved portions of the lungs were dry-cupped and counter-irritated with mustard, the chest was kept wrapped in an emollient poultice, which was renewed every three or four hours. Carbonate of ammonia and small doses of aconite were given regularly at short intervals. He had taken no food during the last few days, and now could not be persuaded to take more nourishment than small quantities of milk to which a little brandy had been added.

26th. Morning temperature 102.5°; pulse 136; respirations 44. Urine scanty and high colored, but contained no albumen. No change during the afternoon.

27th. Morning temperature 102°; pulse 130; respirations 40. Slight improvement since yesterday. He continued in nearly the same condition during the following two or three days, when he began to gradually improve, his lung and heart troubles not entirely passing away until nearly three weeks later. After the chest troubles developed, the eruption on the skin became much darker, and was more tardy than it is usually in fading. The face contained no measley eruption, but the rash here presented the appearance found in a typical case of scarlet fever, with the exception that desquamation was not complete. At the height of the disease inflammation attended by suppuration of both middle ears manifested itself.

On June 13th, the left ear had regained its normal acuteness of hearing, but that of the right ear was still somewhat impaired. The eyes were the seat of acute phlyctenular conjunctivitis, but the corneæ and deeper structures were uninvolved. The urine remained free from albumen throughout the attack. During the first five or six days of his illness he ate very little. He is to-day, June 23d, quite well, except a recent attack of bronchitis.

CASE 2.—Mamie, a bright and vigorous girl, ten years old, enjoyed excellent health until her present illness. She was the third and last, in a family of three children, to contract measles. A sister, three years younger than herself, had, the early part of May, of the present year, a moderately severe attack, attended by considerable laryngitis and bronchitis. The recovery of this sister was rapid, uninterrupted, and complete. The youngest sister was attacked by measles one or two days before the eldest, and suffered quite severely from laryngeal, bronchial and conjunctival inflammation. The parenchymatous tissue of the lungs was but little involved. This one, too, made a good recovery after a rather tardy convalesence, the eruption being a little darker than usual, and remaining visible more than a week longer than we commonly find in this disease.

My attention was first called to Mamie's condition, May 17th, three days after she had first complained of feeling sick. Her eyes were watery and conjunctivæ injected; temperature 102°; pulse 130; respirations 32.

18th. Morning temperature 102.5°; pulse 134; respirations 36. The eyes were quite red, conjunctivæ ecchymotic, and nose discharging freely. A constant laryngeal cough annoyed her. An eruption was just beginning to appear on the face. Evening temperature 103°; pulse 136; respirations 36. Bleeding from the nose frequent during the last twenty-four hours.

19th. Morning temperature 102°; pulse 130; respirations 32. The face was completely covered by a measley eruption, which had almost entirely spread over the body. She was not troubled with cough, but was feeling well, although she had eaten nothing during the last four or five days. Nose bled freely several times during the night. Evening temperature 104.7°; pulse 148; respirations 64. The pulse was small and exceedingly irritable; breathing short and labored. A hacking cough, which the mother said began at 5 P.M., was now very troublesome. Her feet and hands were much cooler than the other portions of her body. Percussion resonance over the bases of the lungs, posteriorly, was slightly impaired, and numerous crepitant and subcrepitant râles were heard throughout the chest. Vesicular breathing was lessened in the lower but increased in the upper portions of the lungs. The heart was acting tumultuously, and the sounds were so indistinct that clotting in the right ventricle was feared.

The physical examination of the chest, when taken in connection with the temperature, pulse and respiration, showed that acute and violent congestion of the lungs and bronchial tubes had taken place. It was evident that unless the onward march of the disease was speedily checked acute œdema of the lungs, or capillary bronchitis, complicated by pneumonia, might terminate the little sufferer's life.

The chest was thoroughly dry-cupped, and sinapisms, followed by a poultice reaching from the second to the twelfth ribs, and encircling the entire chest, were applied. Half-drop doses of tincture of aconite root, in combination with the solution of acetate of ammonia and sweet spirits of nitre, were given every two hours, alternated by five-grain doses of carbonate of ammonia.

At 9 P. M. her temperature had fallen to 103°; at 11 P. M., but little change; same treatment continued for the night.

20th: At 6 A. M., temperature 103°; pulse 136; respirations 44. Not having slept much during the night, she felt tired and weak. The lower portion of each lung was partially consolidated, and in the upper there were heard exaggerated breathing and numerous crepitant and subcrepitant râles. During the night the eruption had become very much darker, many of the papules looking like dark blotches of extravasated blood. Digitalis was substituted for aconite. Throughout this and the following day she remained in nearly the same condition. At 9 P. M. of the 21st she was given, by mistake, about two ounces of brandy. This caused, for a short time, an increase in the frequency of the pulse and respirations, and gave rise to considerable cough, but the temperature fell about 2.5° within two hours from the time the overdose of brandy had been given.

22d. 8 A. M., temperature 99°; pulse 124; respirations 36. During the day the temperature rose to 102°; pulse to 132; respirations to 40. The pulmonary trouble soon began to lessen, although for nearly two weeks she took, in the way of nourishment, but little beside very small quantities of milk, to which a little brandy had been added. Her improvement, though slow, was continuous, and within eighteen days from the time of the first appearance of pneumonic infiltration only a slight portion of the base of the right lung remained involved, the left lung having almost entirely cleared up.

June 15th. She was looking and feeling well; only a little harshness in the respiratory murmur at the base of the right lung remained. A few days after the pulmonary complication began, the eruption all over the cutaneous surface was dark and hemorrhagic in appearance, presenting during convalescence, before the pigment of the blood was absorbed, the condition seen in so-called black measles. Traces of the eruption were visible nearly four weeks after the beginning of the disease. The urine was repeatedly examined during the attack, but no albumen was detected. So far, no sequelæ have developed.

Remarks —It is a well known fact that physicians in the country (in some parts of the United States, at least) are rarely called to see cases of measles, and that in the majority of instances, in many of the rural districts, when medical advice is sought, it is for some complications of sequelæ, the eruption having disappeared or is fast fading. I remember having seen, when living in the country, large families of children seized almost simultaneously with this eruptive fever, but I never knew a physician to be summoned for any of them.

It is believed by some that the exanthematous group of diseases is less severe in the country than in large cities. For over seven years, during which time I have been actively connected with one, and at times with two, of the largest dispensaries of the city, I had not met with cases of measles presenting very alarming symptoms, until the recent epidemic, which is now nearly over.

I have never lost a patient from the measles or its complications, but Dr. J. M. Keating, in an interesting and scientific paper on "Heart Clot in Measles," presented to the College of Physicians of Philadelphia, the first Wednesday of this month, reported four deaths from this disease, occurring during the spring and winter months of the present year, among the children under his care in the Blockley Hospital.

That some epidemics greatly increase the death rate from measles, may be gathered from extracts from Trousseau, Chadbourne and Raymond, quoted by Dr. V. P. Gibney in his communication on the "Sequelæ of Measles," to the New York *Medical Record* for June 3d, 1882. "Trousseau says, 'In an epidemic which I observed at the Neckar Hospital, in the years 1845 and 1846, out of twenty-four children who had measles, twenty-two died of peri-pneumonic catarrh; the other two escaped this terrible complication. This statistical fact enables you to estimate the frightful severity of this affection . . . . and the physician who considers measles a mild disease till he encounters one of these epidemics will afterward modify that opinion.'

"Dr. Chadbourne, in the *American Journal of Obstetrics and Diseases of Women and Children* for October, 1880, reports an epidemic of measles which prevailed in the New York Foundling Asylum in the spring of that year. There were forty-eight deaths in three hundred cases, twenty children dying of capillary bronchitis, broncho-pneumonia and œdema pulmonum. Twenty died from convulsions."

"Dr. Raymond, of Brooklyn, presented last year a report based upon the returns to the Brooklyn Board of Health, headed 'Measles Not a Trivial Disease.' Even in the limited number of cases of measles reported to the Board of Health of that city, in one year there were fifty-nine deaths from complications. Of lesions pertaining to the nervous system, six died of meningitis and hydrocephalus, thirteen of convulsions, and two of congestion of the brain. Respecting the pulmonary system, three died of congestion of the lungs, one of pulmonary apoplexy, eighteen of pneumonia, and five of laryngitis. Two died of dysentery."

During the recent epidemic of measles, the severity of the disease has been in a direct ratio to the age of the patient. This has been the rule in most cases I have seen, and if the mortality of this exanthema in camp life is due as much to age as to exposure, military statistics would still further substantiate this view. In the late War of the Rebellion, according to Bartholow, one-fifth of all the soldiers who suffered from measles died, their death being due directly or indirectly to this disease.*

Heart Complications.—All authorities are agreed that laryngeal and broncho-pulmonary troubles are the most frequent complications of measles, but endocarditis associated with this disease receives only a passing notice by the most systematic writers on the diseases of the heart. I have hurriedly looked through the works of Flint, Walshe, Da Costa, Latham, Fothergill, Stokes, Hayden, Markham, and Sibson's article on endocarditis, in Reynolds' System of Medicine, but have failed to find a single case of inflammation of the lining membrane of the heart

* Sanitary Memoirs of the War. (Quoted from Flint)

described or referred to in connection with measles. Some of these authors give measles as a cause of endocarditis. Was the heart murmur in Case 1, in this paper, due to endocarditis, or to an altered condition of the blood? The condition of the blood was apparently sufficient to give rise to a murmur, and if the diagnosis of heart trouble had been based upon the abnormal sound heard at the apex of the heart, the subject would scarcely be worthy of consideration. Certain symptoms pointed toward organic heart disease: First, the pulse was very rapid and irritable before the temperature began to rise, and the murmur was preceded, a day or two, by a prolongation of the first sound of the heart; secondly, the murmur was preceded and attended by pain and a sense of oppression over the præcordium, which was relieved by dry cups, sinapisms and poultices; thirdly, the cardiac irritability, as indicated by the pulse, extended well into convalescence.

Laryngeal Complications.—Another point of interest in the recent epidemic of measles was the tendency to diphtheritic inflammation of the larynx. This complication was not well marked in the cases coming under my care, only intense redness of the fauces, attended by great pain in swallowing, being found; but Dr. Keating, in his recent communication to the College of Physicians of this city, reported quite a number of cases of membranous laryngitis complicating measles.

Pulse.—Although many of my cases were doing apparently well, the irritable and frequent pulse invariably manifested at the height of the febrile action made me more or less apprehensive lest something untoward should occur. I have not seen a case of measles during the last four or five months that did not have a pulse frequency, at some stage of the disease, of 120 per minute, and in some cases this was increased to 130 or 140.

Sudden Changes.—The recent epidemic has been marked by sudden and unfavorable changes in the course of the disease. This fact is illustrated by the clinical history of Case 2 of this paper. In this instance a change was unsuspected, for at my morning visit everything, so far as I was able to judge, was doing well, yet in the evening the symptoms, for a time, were so grave that the patient's life was threatened. Several physicians have told me that they have of late met similar cases.

The prevalence, during the last four or five months, of a catarrhal fever, and the altered condition of the blood found in severe cases of measles, were probably the chief causes of these sudden changes.

Prof. DaCosta, on the first Wednesday of last month, presented to the College of Physicians of Philadelphia a concise paper on "Catarrhal Fever," observed during its recent manifestations, briefly detailing the history of a number of cases. In this fever the air passages bore the brunt of the disease, and sudden and alarming symptoms were not uncommon, although death rarely occurred unless the fever was complicated. It is probable that the frequency of typhoid pneumonia, and pneumonia occurring in connection with typhoid fever, during the past winter and spring, may be accounted for by the presence of this semi-epidemic fever. The weather of the present year has favored the development of catarrhal troubles.

To the condition of the blood in measles, until recently, attention had not been directed. The credit of the initial investigations of the blood condition in this eruptive fever is due to Dr. J. M. Keating, of Philadelphia.* He investigated and caused to be investigated the condition of the blood in a number of cases. In the mild cases no perceptible blood alteration was observed; in the cases that were more than usually severe, yet did not present very unfavorable symptoms, the white blood corpuscles, increased in number, contained micrococci in varying numbers; in the severest, and not infrequently the fatal, cases, the white blood corpuscles were increased in number, many of them disorganized, and these blood constituents and the liquor sanguinis swarmed with myriads of micrococci. In all his fatal cases (four in number) death was attributed to heart clot. An objective $\frac{1}{18}$ of an inch was used in these investigations.

If the condition of the blood was, as found in these cases, present in all the worst cases of the recent epidemic, the frequent, irritable and vibratory pulse, and the tendency to heart complication in a number of cases, are easy of explanation.

According to my experience, the recent epidemic of measles, in comparison with its severity, has been remarkably free from cerebral trouble. A few deaths from convulsions and coma have been reported, but the proportion has been small.

Diarrhœa has been present in quite a number of cases, but it has rarely been sufficiently persistent or severe to require special attention.

Treatment.—The common-sense management and general treatment will not be mentioned. In the treatment of some of Dr. Keating's cases, alcohol alone was relied upon for the relief of the alarming symptoms of dyspnœa and flickering pulse, associated with severe pulmonary complication, or with the formation of heart clot. Brandy was given in two-drachm doses, every hour or two, to a child a few years old. This was suggested by Dr. Formad, in consultation, because the latter's cultivated micrococci were readily killed by alcohol.† My cases, when grave pulmonary symptoms showed themselves, were mainly treated, externally, by dry cups, sinapisms, and poultices; and internally, by carbonate of ammonia, digitalis and alcohol. When the body temperature was considerably elevated and the skin dry, small doses of aconite instead of digitalis were given at short intervals. In case numbered two, decided improvement was manifest after two ounces instead of two drachms of brandy were given by mistake. In this case alcohol was not well borne during convalescence, it seeming to increase the evening rise of temperature, while resolution was going on in the lungs.

Remarks upon Dr. Eskridge's Paper.—Dr.

* Read before the College of Physicians.

† In answer to my inquiries, Dr. Formad writes me that "one or two drops of alcohol added to one drachm of his culture liquid stopped the growth and multiplication of the micrococci."

Samuel B. McDowell narrated the following interesting case: Miss —, aged eight years, complained of the ordinary prodromata, and was first seen on the second day of the eruption. The exanthem was well marked, but of a peculiar dark hue. Catarrhal phenomena were not a prominent feature. On the third day the eruption was decidedly purplish and strikingly resembled minute ecchymoses. Patient was in other respects not unusually ill. Was suddenly unable to void her urine, and tenesmus developing, I was summoned. After hot fomentations were applied, urine intimately mingled with blood was passed, and subsequently almost pure blood. The hæmaturia was so pronounced that, upon standing, a large coagulum formed. I neglected to mention that epistaxis preceded the appearance of the rash. No other complications occurred and the rash began to fade on the thirteenth day. Patient is now thoroughly convalescent.

Dr. James B. Walker has observed numerous cases of measles occurring among emigrants' children who were sent to Blockley. The eruption resembled that answering the description of the so-called German measles, and was characterized by efflorescence sharply defined, with interspaces of clear skin. Mild catarrhal symptoms prevailed, accompanied by enlargement of the cervical lymphatic glands. There was no uniformity of the size of individual papules and patches. The back is the region that should be inspected in exanthemata. In measles there are diagonal lines of patches running downward and outward from the spinal column. This I have seen so frequently that I regard it more pathognomonic of morbilli than the reputed crescentic arrangement. In Rötheln this form of the eruption has not been noticed. Regarding sequelæ, one child died of tubercular meningitis immediately after an attack of measles, but whether this had previously existed, or developed as a consequence, cannot be stated, as the parents spoke a foreign language, preventing ascertaining of anterior condition of child's health. Diarrhœa prevailed in all cases in the hospital during recent epidemic, and many fatal cases are attributed to this enervating complication.

Dr. L. Brewer Hall has heard a great deal about eye troubles following measles, but does not know of the truth of the belief. Many eye troubles that result from weakness follow this, as any other asthenic disease, but that they depend directly upon measles, he doubts, or at least is not in possession of reliable data. The debility preceding and following measles aggravates existing eye affections. One case of choroido-retinitis under observation, seems to be due to measles. The evils of a dark, illy ventilated apartment are certainly greater than the advantage, if any, gained by exclusion of light. In phlyctenules and conjunctival affections there is frequently increased congestion of lower quadrant of choroid, and even striation of retina, which, however, are not followed by serious consequences. The ear is frequently the seat of suppuration. The seat of trouble is in the middle ear. Perforation of membrana tympani should be treated promptly, with a view of healing. These troubles are amenable to ordinary treatment.

Dr. J. T. Eskridge noticed that epistaxis preceded the accession of severe symptoms in two cases. Diarrhœa in some of the cases was profuse, but not persistent. Regarding the use of aconite, I consider it very efficacious, even in fevers with considerable prostration, when administered in small and frequently repeated doses. It lowers arterial pressure, promotes perspiration, thereby relieving the harsh, dry skin, and contributes largely to the comfort of the sufferer.

For suppuration of middle ear cleanliness is a *sine qua non*.

Editorial Department.

Periscope.

The Effects of Certain Remedies on the Irritability of the Cerebrum.

Hitzig studied first the effect of remedies on the irritability of the cortical substance of the cerebrum. P. Albertoni, of Genna, has taken up this subject again and published his observations in the *Archiv. f. Experiment. Pathol. and Therap.* Bd. xv, Heft. 3 and 4, 1882. His experiments were twofold in character. He wished to determine, first, what changes of the irritability of the cortical substance of the cerebrum would take place under the influence of certain remedies, and to clear up at the same time certain questions concerning the treatment of epilepsy.

By experiments it has been clearly proven, that in dogs the electrization of the so-called irritable zone of the cortical substance of the brain produces an epileptic seizure. It is further known that of all forms of epilepsy the most common is that which is caused by a discharge beginning at the cortex of the cerebrum and spreading over the whole nervous system.

Albertoni's experiments were made on dogs and monkeys, with bromide of potassium, atropia and cinchonidia. The results were as follows:—

1. The continued administration of bromide of potassium diminishes in dogs, decidedly, the irritability of the cerebrum. If a brain, under the influence of the bromide, is irritated by an electrical current the effect is *nil* or hardly observable. One single large dose of the bromide will also reduce this irritability in a high degree.

If the administration of the bromide is continued for a long time in dogs, irritation of the irritable zone of the cortex of the cerebrum (especially of the irritable zones for the facialis

and the extremities) with even a far stronger current than that which, in a normal condition, will cause severe epileptic seizures, proves itself ineffectual, causing no response.

The conclusion may be considered correct, that a continued use of the bromide obtunds the irritability of the irritating point of the cortex of the cerebrum, as well as it prevents the spreading of the irritation.

2. Atropia, in not too large, but still poisonous doses, increases the irritability of the cerebrum, as proven by the greater irritability of the irritable zone of the cortex to an electrical current.

The differences in the irritability and in the development of the cerebrum explain satisfactorily the following interesting facts: (*a*) the diminished effect of atropia in children and young dogs; (*b*) the fact that the brain symptoms caused by atropia are far more intense in dogs than in sheep, the brain of which is more developed, but much less irritable; (*c*) the total want of effect of this drug in pigeons, the cerebrum of which is unirritable.

The possibility of inducing epileptic seizures in the larger mammalia by irritating with an electric current certain parts of the cortex of the cerebrum, is, by atropia, neither diminished nor removed.

3. Cinchonidia, in therapeutical doses, increases in epileptics the number of the seizures. As well as all other alkaloids of the Peruvian bark, cinchonidia is contra-indicated in epileptics.

If the cerebrum or the psycho-motoric centres are removed, cinchonidia will still cause epileptic attacks. This drug has an irritating effect on the central motor-ganglia.

The epileptic seizures which take place in dogs when under the influence of large and fatal doses of cinchonidia, are prevented in animals which have been kept for a long time under the continuous influence of bromide of potassium. At the same time, even the largest doses of cinchonidia lose, under such circumstances, their fatal effect. This proves that the bromides are indicated whenever epilepsy is caused by a condition of tension of the nervous centres.

The long-continued use of atropia prevents neither the epileptogenic nor the fatal effects of cinchonidia.

In epilepsy due to a condition of tension in the nervous centres, atropia is not only useless but hurtful. It may be administered, however, in fresh cases of epilepsy, caused by fright. In such cases, atropia should be given, up to poisonous doses.

In cases in whom the epilepsy is caused by congestion or obstruction of the blood vessels of the brain, atropia may be of benefit by producing contraction of the vessels, and preventing, in such a way, that hyperæmic state which induced the seizures. In cases of peripheral origin it may also be useful by obtunding the irritability of the peripheral ends of sensory and motor nerves.

Treatment of Infantile Gastro-Enteritis.

From observations made in the Children's Hospital at Pesth, Epstein concludes (*Prayer Medic. Wochens.*) that a liquid diet, poor in fatty matters, is the basis of treatment of gastro enteritis in young infants. He recommends particularly an albuminous lemonade, obtained by beating up the white of an egg with a pint of water, previously boiled, the resulting mixture being then carefully filtered. At the Pesth hospital this is prepared fresh three times daily, and is kept in a bottle well corked, and placed on ice. In a word, all precautions are taken to prevent the introduction of micro-organisms into the system.

Nursing from the breast should be completely stopped for the first few days. Every three hours, fifty grams of milk at a lukewarm temperature may be given to the child, either with the bottle or by spoonfuls. The child should not be put back to the breast until the loss of flesh, which is considerable at first, commences to diminish. Again, when at the commencement there is violent vomiting and rejection of yellowish curds, M. Epstein washes out the stomach daily, for from eight to fifteen days, by means of the œsophageal tube. As regards direct remedial measures, M. Epstein employs the following potion:

℞. Sodæ et magnes. benzoat., ℈ iv
Sp. vini gall., ʒ ss
Aquæ, ʒ vj. M.

Sig.—Teaspoonful every two hours.

When there is any tendency to collapse, recourse may be had to the following:—

℞. Tr. valerian., ʒ ss
Vini port (pur.),
Æther. sulph., āā ʒ s. M.

Sig.—One or more drops of this mixture may be given in a spoonful of water.

When the child presents any sign of cerebral hyperæmia, with great agitation, chloral in small doses may be prescribed:—

℞. Choral. hydrat., grs. viij
Aquæ, ʒ xiij. M.

Sig.—A teaspoonful of this solution may be given every half hour while excitement continues.

Finally, when the inflammation has reached the large intestines, and symptoms of dysentery supervene, it may be attacked directly by the following enemata:—

℞. Ac. boracic., ʒ ss
Aquæ destill., ʒ iij. M.

or with—

℞. Argenti nitrat., gr. xij
Aquæ destill., ʒ ixss. M.

The results obtained from this course of treatment are, it appears, excellent.

Sick Headache.

Surgeon Major Roehring, of Amberg, reports, in No. 32 of the *Allg. Med. Centr. Zeit.*, April 22, 1882, a case of headache of long standing, which he cured by salicylate of sodium, which confirms the observation of Dr. Oehlschlager, of Danzig, who first contended that we possessed in salicylic acid one of the most reliable remedies for neuralgia. This cannot astonish us if we remember that the action of salicylic acid is, in more than one respect, and especially in its influ-

ence on the nervous centres, analogous to quinine.

While out with the troops on manœuvre, Dr. Roehring was called to visit the sixteen-year-old son of a poor peasant family, in a neighboring village. The boy, who gave all evidences of living under bad hygienic surroundings, but who had shown himself very diligent at school, had been suffering, from his sixth year, several days every week, from the most intense headache, which had not been relieved by any of the many remedies tried for this purpose. A careful examination did not reveal any organic lesion or any cause for the pain, which seemed to be neuralgic in character, a purely nervous headache. Roehring had just been reading the observations of Oehlschlager, and knowing, from the names of the physicians who had been already attending the poor boy, that all the common remedies for neuralgia had been given a fair trial, thought this a good opportunity to test the virtue of salicylate of sodium. He gave the boy, who, in consequence of the severity of the pain, was not able to leave his bed, ten grains of the remedy every three hours, and was surprised to see the patient the next day in his tent and with smiling face. The boy admitted that he for years had not been feeling so well as he did then. The remedy was continued, but in less frequent doses, for a few days longer; the headache did not return. Several months later Dr. Roehring wrote to the school teacher of the boy, and was informed that the latter had, during all this time, been totally free of his former pain, that he was much brighter than formerly, and evidently enjoying the best of health.

It may be worth while to give the remedy a more extensive trial, and the more so, as we are only too often at a loss what to do in stubborn cases of so-called nervous headache.

The Treatment of Fracture of the Skull with Depression.

On this important and interesting subject the *Lancet* makes the following remarks:—

It is not improbable that in the operative treatment of injuries and diseases of the skull, some of the most important advances in surgery in the immediate future will be made. We now operate freely on deformed bones and diseased joints; operations on the abdominal viscera are now undertaken, which but a few years ago were looked upon as altogether beyond the bounds of the practicable; and the therapeutic advances that have made these procedures so successful may be equally well applied to the surgery of the head. But accuracy in diagnosis is an essential condition of successful treatment, and as the recent discoveries of the special function of individual portions of the surface of the brain are rendering exact diagnosis of superficial brain lesions possible, it is not rash to foretell that surgery will keep pace with the science of diagnosis. The surgical treatment of depressed fracture of the skull has been formulated into the proposition that when accompanied with evidence of compression of the brain, an operation to remove the depressed bone should be undertaken at once. This is the general if not the universal practice among British surgeons. But latterly, some inclination to extend the use of the trephine has shown itself in more than one quarter. The reasons for this extension are that the operation, when properly conducted, and especially when carried out with due precaution against septic infection of the wound, is not a very dangerous one, and if we may argue from Dr. Yeo's experiments on monkeys to man, we may say that the use of the trephine adds very little, if at all, to the gravity of a case. Again, surgeons from time to time see cases where the results of a post-mortem examination show that a life might have been saved by a timely use of the trephine. In Paris the doctrine was first promulgated that the trephine ought to be used in *all* cases of *compound* fracture of the vault of the skull, whether actual depressions of bone, or symptoms of compression, be present or not. And lately in America, it has been urged by Dr. Gunn that in *all* cases of depressed fracture, with or without symptoms of compression, and whether simple or compound, the depressed bone should be elevated. While we fully believe that the operation of trephining has fallen into undeserved disrepute, and might with advantage be resorted to more freely, we think that Dr. Gunn's proposal is unsound and dangerous. It is a familiar fact to any surgeon of large experience that patients who have received depressed fractures go through life quite unaffected by them, and while such is the case no appeal to cases in which the course of events is different ought to induce a surgeon to submit all cases alike to operation. For there is not conclusive evidence before us that the evil effects of depressed fractures, which often arise, may, without giving rise to symptoms, advance to such a degree as to render trephining useless. There appears, then, to be no sufficient ground for formulating the rule of practice otherwise than as at present, but it should be more liberally interpreted, close watch for symptoms of local mischief should be kept up, and the trephine resorted to as soon as any such symptoms declared themselves, even though slight, and with strong hopes of a successful issue, instead of, as at present, looking upon it as a *dernier ressort*, and using it timidly and with gloomy foreboding.

A Peculiar Idiosyncracy as to Mercury.

In the *Practitioner* Dr. Simeon Snell reports the following unusual case:—

Mrs. C., a widow, aged 41, by occupation a monthly nurse, was sent to me on October 26th, 1881, by her medical man. For some weeks she had perceived that her sight was getting defective, but especially the right eye had become worse quite recently. She had suffered from slight rheumatism at different times, and now attributes her complaint to "cold," but there seems good reason to suspect a specific taint.

In both eyes the vitreous humor was hazy, and floating films were noticed, especially in the right eye. The left pupil dilated well to atropine, but the right displayed a tag of adhesion at its lower part. R. V. = $\frac{5}{10}$; L. V. = $\frac{5}{10}$. The patient was hypermetropic ($\frac{1}{16}$), and the vision of the left eye was materially improved with the

appropriate glass. Iodide of potassium in 4 gr. doses, with cascarilla, was prescribed; and atropine drops were ordered to be instilled into the eyes.

October 29th.—She is to-day somewhat better.

November 8th.—In the right eye a more acute phase of iritis is noticed, and in the left the films in vitreous are more marked. A drachm of the liquor hydrarg. perchlor. was now added to each dose of the mixture.

In the course of the next few days I heard from her medical man that she was much worse; "he was at a loss to account for her symptoms;" and on the 12th he had stopped the mercurial He desired me now to admit her into the Infirmary. The patient has since told me that she commenced the fresh medicine (hydrarg.) on the 9th, and that after three doses of it she felt ill, and continued to get worse while she was taking it.

On November 18th she came to the Infirmary, but appeared so weak, and told me also "that the vomiting which commenced while taking the medicine" had only ceased for a few days, that it seemed desirable to place her on the medical side of the house, and she thus passed under the care of my colleague, Dr. Bartolomé. Under his treatment her general health rapidly improved. On December 20th, however, the perchloride was again ordered. The next day the temperature had risen to close upon 104°. There was vomiting, also, not merely after food or drink, but at other times; the tongue was furred, and complaint was made of pain in the head. On the discontinuance of the mercury and the substitution of a stomachic, the temperature fell, with a corresponding improvement in her general condition. Subsequent thermometric observations displayed a normal temperature, with occasionally a very little above.

As I have intimated, she recovered again, and on January 12th, 1882, was transferred to my care in much improved health. The pupils dilated well under atropine, but the edges were somewhat irregular, and the vitreous in both eyes was turbid. In addition to continuing the atropine, on January 15th a mixture of citrate of iron and quinine was prescribed, and a powder of 2 grains of hyd. c. creta was ordered to be taken twice daily. She probably had one of these powders the same evening, and there was a rise of temperature, with the vomiting and general disturbance as before. I believe she only had three, or at the most four powders. The fall of temperature after their discontinuance was marked; there was a subsequent rise, caused, I fancy, by a troublesome alveolar abscess.

Under small doses of potassium iodide she has since done well.

The foregoing case is of interest as exhibiting an unusual effect of mercury. It is not uncommon to meet with cases in which a small dose of the drug has produced salivation, but in the case under consideration there were no signs of ptyalism. Twice, however, it is seen that a rise in temperature occurred after the administration of the mercurial. No record is at hand of the temperature in the illness, after the use of the perchloride of mercury and iodide of potassium before admission to the infirmary. I apprehend, however, that there can be little doubt that it was similarly affected as in those instances more closely observed.

It should be added that the urine was normal.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

—"The Genius of Medicine," is the title of a very interesting address, delivered before the Florida State Medical Association by Dr. Robert B. S. Hargis, of Pensacola, Fla. It is really a short and very concise account or history of the progress of the science of medicine from the earliest days to the present time. While it does not take the place of more pretentious volumes on this interesting subject, it yet will serve to impress on the mind of the reader the dates of, and circumstances attending, the advent of the most important events in medical history. A short account is given of the introduction and progress of sanitation in our country. The author tells us that in the earlier part of the decade from 1860-70 the chief sanitary officer of the city of New York was a very ignorant politician, and its sanitary inspectors were keepers of grog-shops. One of them, when asked, "What is hygiene?" answered, "*a mist arising from the ground;*" while another stated that the best preventive of smallpox was to "burn coffee in the room." The author pays a high tribute to Dr. Stephen Smith, of New York, to whose unremitting exertions we owe the existence of the American Public Health Association. The essay comes to us in the form of a reprint from the July number of the New Orleans *Medical and Surgical Journal*, and we regret to say that numerous typographical errors and misplaced punctuation make it rather difficult to read.

——Dr. John MacKenzie, of Baltimore, has had his attention called to the frequent existence of ulceration of the trachea and bronchi in patients suffering from pulmonary phthisis. Desiring to determine whether there existed any relation of cause and effect between these two conditions, the opportunity was afforded him of making examinations of the respiratory organs of all patients dying of phthisis in the Rudolph and Jewish Hospitals of Vienna during a period of five months, and the result of these valuable observations he has incorporated into an address delivered before the Medical and Chirurgical Faculty of the State of Maryland, a reprint from the transactions of which we have received.

The author noted that these ulcerations, for the most part superficial, irregularly round or oval erosions of the mucous membrane, varying in size from a pin's head to a small pea, and tending to coalesce and form large ulcers, were most frequent in the lower portion of the trachea and bronchi. He has seen the trachea in its entire length and circumference, together with the bronchi on both sides, almost completely destroyed, and its mucous membrane converted into a gangrenous mass. These ulcers are never found in the bronchi of the unaffected lung. The Doctor concludes that his observations go to show that diphtheritic ulceration of the larynx, trachea and bronchi occurring in the course of pulmonary phthisis is related to the affection in the lung in so far as it is produced by the corrosive action of the sputa; but that in the present state of our knowledge it is impossible to affirm its specific tubercular nature.

——By degrees we are adding one disease after another to what might be termed the "Bacterian Class." Bacteria, bacilli, micrococci, etc., are terms heard on every side, and yet few, comparatively speaking, have any true conception of what the terms mean. Dr. Charles S. Dolley, of Rochester, New York, in a paper read before the Rochester Society of Natural Sciences, has furnished a very lucid and interesting account of the main points connected with bacteria. The term bacteria, while used comprehensively to designate the whole class of minute organisms under consideration, the author considers an error, since the *bacteria*, in truth, constitute one distinct species, viz: the short, rod-like organisms; then we have the round or oval, which are *sphero-bacteria* or *micrococci*.

Bacilli are those long, stiff, fibre-like bodies, while similar organisms, *yet flexible*, are known as *spirochæte*. Similar long bodies, when curled liked a corkscrew, are called *spirilla*, and when merely wavy or curl like, *vibrios*. Bacteria are very small, a cube the size of a pin's head would contain six hundred and thirty-three millions, and they increase with such rapidity that the progeny of one single germ would, in less than five days, fill all the seas of the world, as stated by Cohn. These bacteria are considered to be the means of conveying disease, in certain instances, because of the morbid material which they contain at the time, but are not in themselves the cause of disease. The greater proportion of bacteria are transparent and colorless. Speaking of Pasteur's researches into the bacteria of disease, Prof. Huxley has said that they fully balance the ransom of $1,000,000,000 paid by France to Germany after the war of 1870–71. This pamphlet is well worth the perusal of all those who have but a vague and indistinct notion of the nature of bacteria.

BOOK NOTICES.

Transactions of the Indiana State Medical Society, 1882. Indianapolis: 1882.

These Transactions make a neat and well printed volume, and the contents are worthy of preservation in book form. Besides the usual proceedings, necrology, etc., there are a number of original articles. The address of the President is an excellent summary of the advantages of sanitary legislation. Of the other papers we may mention one of interest on the health resorts west of the 100th meridian, by Dr. E. S. Elder; a discussion of the treatment of that formidable disease, epidemic cerebro-spinal meningitis, by Dr. R. F. Stone. His treatment is decidedly active and positive, and we should like to have had statistics as to its results. The management of still-born children after resuscitation is a very judicious paper, with many useful directions, by Dr. Wm. H. Bell. Other papers are published from Drs. A. G. Preston, J. R. Weist, Thad. M. Stevens, Mary M. Thomas, N. Field, H. V. Sweringen, J. W. Compton, etc.

The volume may be obtained of the Secretary, Dr. E. S. Elder, Indianapolis.

Atlas of Gynecology and Obstetrics. Edited by Dr. A. Martin. Folio. Published by A. S. Wilde & Co. Cincinnati.

This large and handsome publication is well worthy the attention of the general physician and those who pay special care to the diseases of women. It contains four hundred and seventy-five black and thirty-seven colored illustrations, selected from the works of a large number of eminent European writers. It also has a supplement embracing a number from the "Nouvelles Demonstrations d'Accouchements" of Prof. J. P. Maygrier.

An examination of a number of these plates show that they are accurately drawn and colored, and they cannot fail to be of great use, especially to those whose opportunities of refreshing their anatomical knowledge by dissection are limited.

The work is published only by subscription, and those desiring to purchase should address the publisher directly, who will forward full descriptive circulars.

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TARDY WISDOM.

The cable telegraph, one day a week or so ago, sent the following item of news flying over the western world:—

A CRITICISM.

LONDON, Aug. 11th.—The *Athenæum* says Prof. Esmarch, the eminent German surgeon, has published a lecture which he delivered before the Physiological Society at Kiel, on the treatment of General Garfield's wound. Prof. Esmarch's lecture was to the effect that General Garfield might have been alive but for the treatment he received.

We will suppose the above item is true. It probably is nearly so, as the *Athenæum* is a careful and well informed paper. We ask, is it possible for Prof. ESMARCH or anybody else to form a correct opinion about a confessedly obscure and intricate case without seeing it? Is it fair to pronounce criticisms adverse to the skill of surgeons, when these criticisms are based upon facts developed after the case had terminated, and which could not have been known before?

We have heard of a man who remarked to his censors that there are many cases where it is the most difficult of all things to exercise a judicious foresight; but that anybody can rely upon their *hindsight*. So we think that Prof. ESMARCH, or any other surgeon, with a full knowledge of the lesion in the late President's case, might suggest something which might have been done that was left undone; might object with reason to something done, which had better been left undone. But is not this the history of every unfortunate case? And is there any guarantee that if these steps had been taken the result would have been different? None whatever.

Consultations "by letter" are well known to be unsatisfactory. Some most acute diagnosticians decline to pronounce an opinion on any case where they do not have an opportunity to see the patient. Yet surgeons had, and still have, no hesitation about advising and criticizing this case of gunshot wound. Yet not one of them would be willing to treat a case by hearsay. This indicates a contradiction between their literary and their practical life which should not exist.

Guiteau said that the doctors had killed the President. But he could not find among the many who had shown themselves willing enough to intimate as much in newspapers, medical journals and private conversation, any one of standing who dared come forward and back his opinion on the witness stand. Either they were cowardly enough to let a man be hanged for an act he did not commit, or they had been saying what they knew they could not sustain under cross-examination.

Such expressions were unfair, because they had not sufficient grounds to rest upon. Every one, no matter how eminent, is open to candid criticism. But to claim that the result would have been different had the treatment been other than it was, or to blame the attending surgeons for ignorance of what they could not have known during life, is unjust.

POLICE SURGEONS.

Two recent occurrences, one in England, the other in our own charitable city, call loudly and in unmistakable terms for a well organized and well paid corps of police surgeons. In our city, a man was recently found lying on the street in

an unconscious condition; naturally supposing him to be drunk, for he knew nothing of medicine, and his very calling causes him to regard every one found under similar conditions as intoxicated, the police officer arrested this man and took him to the station-house. The lieutenant in charge, having no more knowledge of the various morbid and dangerous conditions that may nearly simulate alcoholic intoxication, confined this unfortunate to a cell. Shortly afterward he was found dead. Upon subsequent investigation, it was ascertained that this man was a person of respectability, of temperate and industrious habits While walking on the street on a very hot day he had been overcome by the heat, and had perished from sunstroke when possibly intelligent professional treatment might have saved his life. A case very similar to this one has been reported as having recently occurred in London. We had occasion some time ago to note the case of a young girl in England, who, being among strangers, was supposed by all who saw her to be drunk, when in truth she was dying from acetonæmia, and did perish within a few hours. It is unnecessary to insult the intelligence of our readers by detailing the various conditions, such as uræmia, acetonæmia, narcotic poisoning, and the like, that are very apt to be mistaken for the stupor of alcohol by one not accustomed to meet with these conditions. Besides, we must bear in mind that alcoholism, alcoholic coma, is in itself a dangerous condition, capable in certain cases of extinguishing the spark of life, and therefore a condition that requires active medical interference. The profession is in a measure prepared to recognize dipsomania as a material disease, and all are agreed as to the dangerously poisonous effects of large doses of alcohol. Therefore, it is not always safe to leave a man in a drunken stupor to "*sleep it off*" and "*come to of himself.*" To remedy this void in our civilization and philanthropy it will be necessary for our city fathers to make an appropriation for and to organize an efficient corps of police surgeons, whose duty it shall be, each in his respective district, to respond as promptly as possible to all calls made upon him from the station-house to which he has been assigned. Further, it should be made the imperative duty of each police lieutenant to immediately summon the district physician to every prisoner who may be brought into the station-house in an unconscious condition, as well as to all who may complain of being unwell. The cost to the city would be comparatively small (even though thoroughly competent physicians were procured by the payment of liberal annual salaries) when viewed alongside of the enormous wastes and steals of the public money. From a humanitarian standpoint, it would be better to have the physician summoned unnecessarily a hundred, yes a thousand times, than that one worthy citizen should perish like a dog, as in the case just quoted.

Notes and Comments.

A New Way to Detect Stone in the Bladder.

Dr. James McKenzie Davidson, in the *Lancet*, calls attention to the "auditory method" of detecting vesical calculi. This simple method consists in connecting the end of the catheter with the ear of the surgeon by means of an india rubber tube. A light rubber tube two feet long and with a bore three-eighths of an inch in diameter was employed. One end was slipped over the handle of the sound and the other end held close to the ear. No difficulty was experienced in exploring the bladder, because the tube was so flexible, and it only required a little care to prevent the interference of extraneous noises, as rubbing against the coat, etc. A small calculus was introduced into the bladder (for experiment) and when nothing could be heard or felt by the sound alone, yet by means of the tube the calculus was distinctly and unmistakably heard. With a large stone the click was greatly intensified when heard through the tube. A small piece of coal was crushed to rough powder and introduced into the bladder. The ordinary method revealed nothing, but through the tube a rough, grating sound was distinctly heard.

This method of exploration of the bladder may yield important practical results. Not only may (1) a small calculus be detected which would be otherwise overlooked, but (2) it may be that practice will enable the operator to distinguish the size and character of the surface of a calculus readily; and (3) it also appears likely that a

somewhat similar ear connection with a lithotrite will enable the operator to find and secure small fragments more readily, and so crush them.

Compound Fracture of Both Arms.

Mr. E. Downes reports, in the *Lancet*, the following case which occurred in the Kashmir Mission Hospital: A boy, about fourteen years old, met with an accident by which both bones of both arms had been broken one and a half or two inches above the wrist. After receiving the injury he walked twenty miles and received no treatment for ten days. Upon entering the hospital the wounds on both arms were dirty and stinking. There were two wounds, one for each bone, and the right hand was swollen, and pus could be pressed up into the wound from the palm. The large blood vessels appeared uninjured. After the wounds had been cleansed the ends of the bones were sawn off and the limbs were put in bracketed splints, dressing the wounds with lint and carbolic oil. For two weeks the boy lived in great agony, opiates failing utterly to relieve his suffering. Finally improvement came; the discharge became more healthy, the hands looked more natural, pain diminished and appetite improved. After six weeks union was noted. From time to time it became necessary to slit up sinuses into which pus had burrowed. He was discharged after two months and a half; at this time the fingers of the right hand were not of much use and the left hand was somewhat stiff; he could, however, flex the hand and fingers; he could even hold a stick with his left hand, though the grasp was not firm. This case serves to show what can be accomplished by conservative surgery.

The Long Continued Use of Lime Water with Milk

At a recent meeting of the Medical Society of the County of Albany (*Med. Annals*), Dr. X. T. Bates presented a paper on this subject, in which he suggested that the long continued use of lime water and milk may result in the formation of a cement of casein and lime, which will prove a mechanical obstacle to the function of the bowel. Two cases were reported, both of typhoid fever, where milk and lime water was used. In both cases the patients (when convalescent) were taken with severe pain in the abdomen; the first case died unrelieved after ten days. In the second case the rectum was found filled with dry, stony-hard fæces, when broken presenting a gray, glistening appearance resembling cement. These were removed mechanically every day, the paroxysms recurring for eight days, when they ceased and the patient recovered. The discussion was unfavorable to Dr. Bates' theory, which was considered untenable. There is so little lime in lime water that the quantity taken to produce mechanical troubles by its presence would have to be enormous. Milk, alone, will prove very constipating to some persons, and will produce just such hard, glistening, grayish fecal masses as described by Dr. Bates, and they will have to be removed mechanically, causing the patient the most excruciating pain.

Sciatica Cured by Nerve Stretching.

Dr. Truman reports in the *Lancet* the case of a woman whose occupation had required her to sit for many hours daily on a hard wooden stool. In the summer of 1879 she commenced to feel pain down the right leg, which continued, though not very severe, until July, 1880, when it became intense, and since that time she has suffered daily. For two years every known internal remedy and external application has been used in various hospitals, with hardly any relief. On October 21st, 1881, an incision was made at right angles to the course of the great sciatic nerve, through the skin and superficial fascia, the lower edge of the gluteus maximus found and followed to the tuber ischii. The finger was passed deeply down by the outer side of the long head of the biceps, and the nerve identified and drawn to the surface. Two or three steady and vigorous pulls were given in both an upward and downward direction (toward the pelvis and foot, respectively.) The nerve was then allowed to sink. There was no hemorrhage requiring a ligature. A horse-hair drain was placed in the wound, the edges of which were brought together with silver wire sutures and the whole dressed antiseptically. For several days she had very high temperature, which was successfully combated with quinine.

November 16th she was discharged, and up to the present time has had no pain whatever.

Pilocarpia in Diphtheria.

Drs. Archambault and Pousson (*L'Un. Méd.* No. 20–25, 1882) have made a number of observations with the citrate of pilocarpia in diphtheria. They had opportunity of noting its effect in seventeen cases, and have come to the conclusion that instead of doing any good, pilocarpia is undoubtedly *harmful* in diphtheria. None of the cases improved under it, nine died. Seven cases died after the first hypodermic in-

jection. The more the child seemed susceptible to the action of the pilocarpia the more rapidly the case became worse. This confirms the view of other observers.

Willow Leaves in Ague.

The *Lancet* says that an Indian surgeon, Chetan Shah by name, has recently revived the use of willow leaves in intermittent fever. This is an old remedy, now almost forgotten in Europe, while the leaves of several species of willow are still largely prescribed by hakims of India and Afghanistan, especially in the form of a distillate. Among the lower classes of Cabul, and especially in women, quinine was found to irritate the bowels, while the juice of the fresh willow leaves, largely diluted with water, rarely failed to cure intermittent fever, and never caused irritation. In pregnant women the willow leaf is almost always found preferable to quinine.

Glycosuria in Cases of Poisoning by Carbonic Oxide.

In two cases of severe and almost fatal poisoning by carbonic oxide, Dr. O. Kahler (*Prager Med. Wochenschr.*, 1882, No. 48–49,) detected in the urine which was passed during the first twenty-four hours after the poisoning a decided quantity of sugar. In the one case, a servant girl, thirty years old, 0.9 per cent. was found in 1200 ctm. urine, and a still larger quantity was detected in the second case. After cessation of the sugar in the first case, traces of albumen were found in the urine.

The cause of this presence of sugar is believed to be the action of the carbonic oxide on the prolonged spinal cord, similar to the puncture of the floor of the fourth ventricle; but Kahler supposes that the disturbance in respiration may produce it. The fact is undoubtedly of some value for diagnostic purposes.

Special Reports.

NO. XL.—SURGICAL INSTRUMENTS.

The theory of the production and treatment of fractures of the patella are subjects upon which, of late years, every surgeon seems to have felt it incumbent upon himself to particularly study, discuss, and suggest new reasons and new modes of procedure for relief, hence proving two things; first, the great importance of the subject; secondly, the fact that we have not definitely settled and determined without exception the proper course to be pursued in dealing with this bone of contention. It is evident that the primary indication to be met is the holding of the fragments in such position as to get the closest possible union of the fragments, but how to accomplish this desirable result with the least possible chance of failure or the production of worse mischief has been the mooted question. As to how fracture of the patella is produced, it seems to be the common supposition that when a person falls, striking directly or obliquely upon the knees, a fracture occurring under such circumstances is the direct result of the violence of impaction. Theoretically, this seems very logical, but if we pause for a moment to study the mechanics involved, the point at which fracture of this bone usually takes place, and the nature of the fracture, we are constrained to considerably modify our views. The commonest location of the seat of fracture of the patella is in a transverse line across the bone, in the immediate neighborhood of the tendon of insertion of the quadriceps extensor femoris. There are two other forms of patella fracture, however, which are much rarer than the one first mentioned, these being, in the order of frequency, the comminuted fracture, in which the bone is splintered into more than two pieces, and the vertical form of fracture, in which the separation is in the direction of the long axis of the bone, two vertical halves being created; these latter two are generally of more serious import than the transverse, from the fact that to produce them requires that a very great degree of violence is necessary, which violence generally does not exhaust itself upon the patella only, but upon the knee-joint also, laying it open, and thus greatly complicating the case. As a rule, fracture of the patella is the result of a sudden tension or spasmodic contraction of that great tendon of the leg which inserts upon the upper half of this bone, its lower half giving attachment to the tendon (commonly regarded as a continuation of the quadriceps) which runs down to be inserted upon the tibia. Now from the location of the patella it is in a very favorable position for the easy production of a fracture in the case of a violent fall, the condyles of the femur affording a fulcrum over which tremendous leverage may be exercised.

In falling forward, especially where one trips unexpectedly, there are generally made a number of violent efforts to regain an equipoise; in this attempt the muscles on the front of the thigh play an important part; the instinct of the individual makes him make violent effort to extend the leg, the body being unconsciously suddenly retroflexed; thus a decided contractile effort is made by the extensor quadriceps, there being a

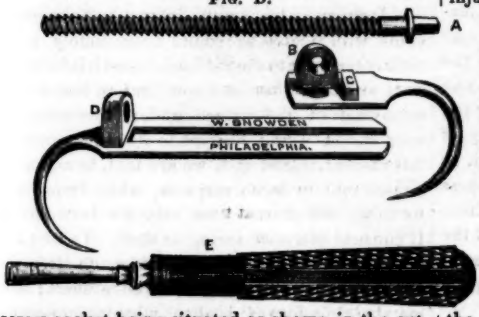
direct ratio between the contractile efforts of the muscle and the attempt made by the individual to save himself; thus the upper part of the patella is violently dragged upward; in the meantime, the flexors of the leg have, in falling, a balance of power which did not before belong to them, they are acting to the very best possible advantage; this being so, their force is propagated along the tibial attachment of the tendo-patellæ, tending to drag down the lower half of that bone, while posteriorly the bony structures back of the patella not permitting the bone to be forced backward, as it normally would be, as the resultant of these two forces, acts as the fulcrum over which it is broken, so that it is probable that in cases of fracture of the patella, the damage is done before the bone has come in contact with the ground; when a person falls backward, the same mechanical principles will apply; the body being thrown violently back, extreme extension is made upon the quadriceps; the fulcrum is the same; the patient, in his efforts to recover himself, unconsciously, almost, flexes the leg on the thigh, uses the ball of the foot and the toes as a steadying point or fulcrum, and will generally, before he falls, make a violent effort of flexion of the leg, accompanied by a spasmodic forward and downward thrust of the femur; thus we have two fulcrums acting, the metatarsal phalangeal articulations below, and the articular expansion of the femur above, at the point at which the patella is situated; the powers are represented by the quadriceps extensor and by the muscles of flexion; the resistance to be overcome is simply the cohesive and adhesive forces in the particles of the patella. If any one will himself go carefully through the experiment of falling forward and backward, he will, I think, find that what is here set forth actually takes place; that there is violent extension, plus a counter effort of flexion, and in falling backward, at the end of the fall are abduction and rotation outward of the foot and lower part of the leg, thus giving a twisting, screwing motion to the tendon between the patella and the tibia.

Of course, these remarks will not apply in those cases where fracture is the result of direct violence, as in the case of a direct blow which splinters or comminutes the bone, or a knife thrust, which divides it into two lateral fragments. Experiment has shown, however, that the patella will stand an extraordinary amount of direct violence without fracturing, this, no doubt, being partly due to the slipping motion which this bone has when struck, thus enabling it to glance out of harm's way. We think we may say there is a universal belief in the fact that muscular violence is the principal factor in the production of this lesion when fracture is the result of a fall. The existence of fracture having been once established, the first question to arise is that of treatment, and this has been the stumbling block of the profession. The great trouble has been, it seems to us, that in many cases too much has been attempted too soon. This has been especially the case when hooks of various kinds have been employed in the treatment of this fracture; in no place is the beauty of the advice, "learn to wait," better exemplified than here. Under no circumstances is it advisable to employ hooks until the entire subsidence of the first inflammatory action, and the disappearance of the swelling which takes place immediately after the receipt of the injury. If hooks are introduced during this period the most lamentable results may be precipitated, not the least of which is erysipelas. The law is that the hooks should not be introduced before a week or ten days have elapsed from the time of injury, and not even then if any irritation whatever remains at the seat of injury. The Malgaigne hook has been for a number of years employed by many surgeons in the treatment of this fracture, and while some have praised others have reviled it.

With the construction of the Malgaigne hooks every surgeon is familiar, the apparatus consisting, as it does, of four hooks, in pairs, each pair being arranged on a sliding frame. While they answer the purpose of holding the fragments of a fractured patella together, they present the disadvantage, which is at times very great, of being applicable only in certain limited positions; while one hook or the hooks on one side may be readily and properly fastened, the others must take their chances of securing a proper position. Further, they are made to work together on immovable straight lines, while, primarily, the fact exists, that the bone over which they are placed not only presents no straight surfaces, but is decidedly asymmetrical; the result is that it is not always possible to hold properly in position, by Malgaigne's hooks, the fragments of a fractured patella after they are brought into position. Taking all the above facts into consideration, it is evident that more or less modification of the hooks was very desirable, for while in many respects the principle upon which they were founded was admirable, yet in construction they lacked some of the needful qualifications to adapt them to the work they were intended to do. A number of gentlemen in the profession have made more

or less modifications of the hooks, the most recent having been made by Dr. R. J. Levis, of this city. Levis' modification consists, first, in separating the hooks into two pairs, each of which pairs is again separated, in a manner which we shall describe later. Further, the *ends* of the hooks in this improvement are made decidedly longer, more delicate, and *sharper* (more pointed) than in the original apparatus, this improvement permitting of more easy introduction, as well as affording a deeper and consequently better hold upon whatever structures they may happen to come in contact with; there is, besides, less irritation produced by the presence of these long, comparatively finely-pointed hooks, than by the shorter and more blunt hooks of the original. We shall consider one pair of hooks only, the instrument being symmetrical on the two sides. A flat bar of steel, two inches in length and half an inch in the transverse diameter, from which a section is cut extending from the stationary screw socket or head to the end of the bar, thus leaving two lateral tongues upon which the movable hook of the apparatus travels; this arrangement is shown in figure *D*. The permanent

FIG. D.



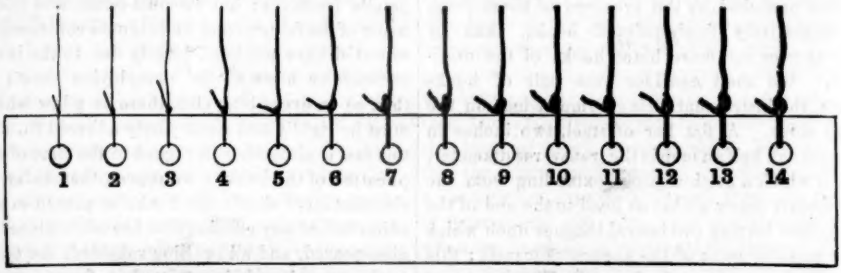
screw socket being situated as shown in the cut, just where the hook begins to spring from the body of the instrument, a screw, *A*, which can be tightened or loosened at pleasure by a key, *E*, plays through this screw bed as well as through the eye, *B*. The nut or elevation, *C*, fits into the tongued portion of the apparatus and prevents all wabbling; while *B*, acting on a pivot, permits the points to be introduced at any distance apart before it is turned into its transverse position and securely fixed by being held by the screw, *A*.

In the accompanying figure the appearance of the apparatus is shown when fixed in position. The result of the arrangement of the hooks in pairs is that they accommodate themselves to any position of the fragments, the movable part being introduced last. Again, by thus dividing Malgaigne's hooks into two lateral halves, the pairs may be separately removed and replaced as desired, which is, of course, a desideratum. There has been, we admit, a great deal of objection in many quarters to the employment of hooks of any description in the treatment of patella fractures; but we must pause and ask if many of the failures and unfortunate contretemps reported have not been largely due to the inexperience or haste of those employing them; in this, as in everything else, there is a law which must be rigidly and unvaryingly adhered to, and this law is altogether in regard to the time of application of the hooks; we repeat, that under no circumstances should the hooks be placed in position before any effusion that has taken place has disappeared, and all swelling subsided, the cases in the meantime being treated as fractures and injuries in other parts of the body and under the same circumstances usually are, any undue overaction or symptoms being combated. Dr. Levis claims that since the employment of these hooks he has seen a number of cases recover, with osseous union, or with such a close coaptation of the fragments as to be indistinguishable from such a desirable result.

PANCOAST'S IRON-DYED SILK SUTURE.

The subject of sutures has of late years been very largely discussed, and many modifications and additions made in this branch of the surgeon's armamentarium, till the list now embraces very nearly everything that possibly could serve the purpose of a suture, from gold wire down through lead, iron, silk and catgut, and all their modifications. The objection we have found to the employment of metal sutures has been that they are more painful in removal than those sutures made of softer material, that certain ones of them, when employed in the exposed portions of the body, have at times a tendency to leave their stains in the tissues in which they are imbedded, and that they cannot be readily accommodated to the size of the eye of the needle with which one may be compelled to work. True, the file will readily remedy this defect, but one does not always have such an instrument handy, and if he does, he does not

care to be bothered filing wire. To meet some of the indications above pointed out, Dr. Wm. H. Pancoast has recently had made an iron-dyed silk, the silk being pure and guaranteed not to contain a cotton filling, as certain silks are known to have. These silks are made in sizes ranging from a very fine thread, suitable for use in operations around the eyelids, etc., to those heavy enough to be employed in ligating the large arterial trunks. Being iron dyed they are not likely to set up any irritation in the tissues, as those silks are which have been colored by chemical processes; the color is warranted to be fully fixed and not to run under any circumstances. Dr. Pancoast claims to have had much more satisfactory results since using this material than when other agents have been employed, and that less irritation is set up by the silk than any form of wire or other suture. As he has been experimenting in this matter for the past three years, his conclusions are worthy of consideration. Personally we have not had, as yet, sufficient experience with the silk to express an opinion, but from accounts given by those who have used it, we are inclined to regard the agent favorably. The plate shows the size of the threads and their commercial number, by which they can be ordered.



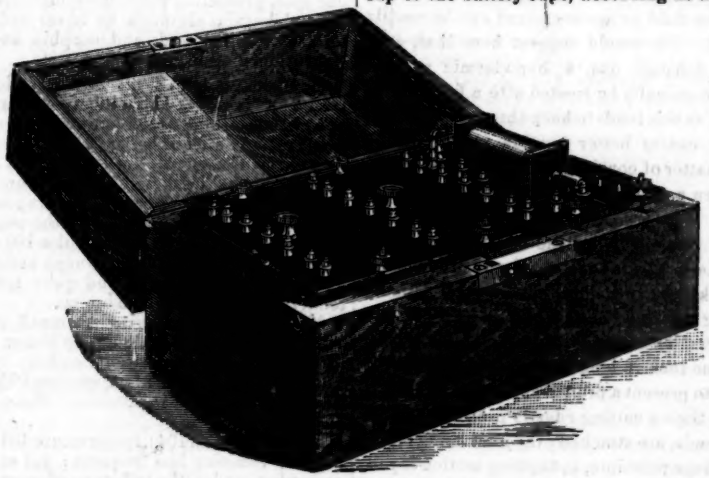
A NEW UTERINE SOUND.

Ease in arriving at a diagnosis is to-day one of the great desiderata of the gynæcologist, and we must admit that, for his assistance, his instruments are, in a measure, as yet almost primitive in their simplicity. These remarks apply more especially to the instruments employed in the diagnosing of flexions and versions in their different degrees. We need some apparatus that, while it is following its course inter-utero, will show, extra-utero, to the manipulator just what course it is pursuing, and the degree to which flexion or version has taken place. Now the expert gynæcologist, of course, will claim he stands in need of no such instrument; that his uterine probe or sound is all that he needs; that he can bend it to a certain curve, introduce it, and that he will almost infallibly be able to tell just where it is, and about what course it is describing: but he must remember that there be those who are not experts; that there are young graduates who have no more knowledge of how to introduce a uterine sound than they have of Choctaw, the average student's experience, under the comprehensive plan of instruction in our so-called first-class colleges, being that which he has had by seeing his professor dexterously give the sound a certain curve, or perhaps only lining the curve out in a general way, on a blackboard.

We are free to confess that we consider it a decidedly risky business to intrust half the graduates with a uterine sound immediately upon their entrance into the profession, and it is for these men, and others too, at times, that an instrument somewhat of the nature under discussion is needed. A sound has made its appearance in this market, introduced, we are told, by a Boston house, that in some respects, when improved, we think will prove a very valuable instrument. It consists of a wire spring or shaft, of about the diameter of the uterine sound, made after the manner of the dental engine flexible shaft; this metal spring, for that is about what it amounts to, measures 12 or 14 inches in length, and possesses a very great deal of flexibility; a thin layer of soft rubber protects the metal portion from all fluids, and hence prevents rusting, etc. A wooden handle is placed about nine inches from the distal extremity. The theory of its operation is this, that the near or external end of the instrument bends in a direct ratio to that of the distal end and in an opposite direction; in other words, if the distal end describes retroflexion, the external extremity will be bent into an anteflexion, the curve expressed being directly as the curve of the concealed end, only in the opposite direction. As we have before said, we have not been enabled to test the instrument ourselves, as yet, but it seems that it might be of use, not only in

uterine examinations, but in examining many other portions of the economy.

Our objections to the instrument as at present made are, that primarily it is roughly finished, the work, seemingly, having been carelessly and hurriedly done; we would suggest as an improvement, that the tips of the instrument be probe pointed and rounded off, instead of being left as they now are, square and more or less sharp on the edges; further, if the last inch were made a little bit more flexible, it seems to us that it would be an improvement, as the instrument would then respond much more quickly to every obstruction or bend met in its course; the rubber coating might also be considerably improved; taking it for all in all, we may say that the idea is fairly good, but the workmanship deficient.



Another instrument recently introduced into this country, from Paris, is the graded nest of hard-rubber anal bougies. Of these there are half a dozen assorted sizes, varying from one and a half inches in diameter down to about a quarter of an inch in diameter; the instruments are made of hard rubber, highly polished, are about twelve to fourteen inches in length, and are packed one within another, thus providing for ease in transportation and doing away with the necessity of carrying a box.

Messrs. Kern, who have imported this instrument here, show also a French syringe for irrigating the eye or ear; this consists of a somewhat flattened barrel, holding about one ounce of fluid, to the extremity of which a cap is screwed, the end of which cap is perforated by pin-holes, to give egress to the water, etc., used; in case it is desired to change the stream from a divided to a solid column or discharge of fluid, all that is necessary to do is to fit over the irrigator a tubular cap, which forms part of the instrument. The chief objection to the syringe is its small size, but it is probable that they will shortly be made to hold larger quantities than they now do.

In the way of electric batteries the latest claimant for popular favor is the McIntosh. A great many are in search of a battery that will give both a galvanic and faradic current. This battery consists of a walnut box, in which is contained a hard-rubber compartment divided into six subcompartments and a drip box; the battery plates consist of zinc and carbon clamped to a hard-rubber top or lid, by means of thumb screws, this rubber plate acting as a cover for the drip cup or the battery cups, according as the battery is active or quiescent; six sets of plates are clamped to each hard rubber cover. By means of the thumb-screws fastening each separate pair of elements, the carbon and metal plates can be changed rapidly and readily, either for repairs or renewal. The under surface of the hard-rubber cover is fitted with a soft-rubber cushion that prevents the spilling or splashing of the cell fluids when in process of transportation; the lid is further screwed down well into place by thumb screws. The cells, six in number, for the production of the induced current are entirely distinct from the rest of the battery, though contained in the same box, and can be, if desired, lifted out and transported separately. Altogether this makes a very compact and at the same time a very desirable battery; the great objection to these combination batteries heretofore has been their liability to be constantly getting out of order; but

this objection seems to be very fairly overcome in this battery.

A very valuable though simple addition to the hypodermic syringe has recently been made by Kern, of this city; this consists of a long, delicate needle, made entirely of aluminium. The great objection to the ordinary steel needle is that it is liable to be corroded by the impossibility of drying the canal of the needle, and that certain fluids corrode the metal rapidly. Frequently, even when good care is taken of the instrument, the needle is found occluded by rust, etc., thus rendering it useless. Aluminium not being readily attacked by the agents ordinarily employed in hypodermic medication, and not being at all influenced by the presence of water, makes, perhaps, the best material possible for the construction of the hypodermic needle, as by it any fluid or agent desired can be readily employed. We would suggest here that, even when in constant use, a hypodermic syringe should occasionally be treated with a few drops of glycerine, as this tends to keep the packing moist, and thus causes better suction in the piston head, a matter of considerable importance, especially when a small quantity of fluid is to be injected.

A new universal uterine scissors is shown also by Kern. This consists of a pair of blades jointed like the ordinary scissors, these blades measuring eight inches in length, slightly curved at the flat. To the ends of these a pair of scissor blades, one inch in length, and so finished on the points as to present a probed appearance, while at the same time a cutting edge is preserved to the extreme ends, are attached; the joint being on the regular hinge principle, the cutting motion is produced by the long blades upon which the scissors proper are mounted. From the cutting blades a wire runs down the convex surface of the long blade handles, passing through an eye just back of the scissor-blade joint on the long arm, and terminates in a ratchet mounted upon a spring, the spaces between the teeth of the ratchet being caught by a stationary bridge. By this wire the cutting blades can be placed at any angle as compared with the long arms of the apparatus, and satisfactorily worked. We should imagine this to be a very desirable scissors, not only for uterine work, but for operations in any locality where there is but little space for ordinary manipulation; it would seem to be particularly available in operations about the throat and nasal passages, the scissor blades working, as they do, at such a variety of angles.

CORRESPONDENCE.

A Curious Case.

ED. MED. AND SURG. REPORTER:—

Mr. Matthew Snow, a laborer; aged 23; weighs 175; strong, muscular; never was sick a day in his life. On the evening of May 26th, while lifting at a large metal wheel, suddenly felt something give way in his bowels, "felt something tear," as he described it, with sharp cutting pain;" he felt sick at the stomach but did not vomit; walked to his boarding house, some half mile; eat a hearty supper; slept well that night. Next day, 27th, being Sunday, walked about, eat his regular meals, felt no inconvenience but soreness in his bowels. At 7 o'clock P.M., after eating a hearty supper, became deathly sick and vomited. I saw him one hour afterwards; found him pale, vomiting, and suffering some pain below the stomach, on the left side. Pain referred to one spot, presenting much the symptoms of strangulated hernia, although he never had any rupture. Gave him brandy and morphia, and ordered warm fomentations over the bowels.

May 28th. Vomited all night; abdomen enlarged and slightly tympanitic; pain paroxysmal; pulse 100; temperature normal; passed urine freely; complains of being cold, but has no regular chill. Consultation with Dr. J. A. Ritchey, of Oil City. Treatment, hypodermic injection of ¼ grain morphia every four hours; turpentine stupes, ice, brandy and milk by the stomach.

May 29th. Still vomiting; pulse 100; temperature 99°; breathing 20; kidneys acting freely; abdomen more enlarged and quite tympanitic; tenderness all over the abdomen.

May 30th. Not suffering so much pain; still vomiting; stomach bulging up above sternum; lies on his back with legs extended; tympanitis increasing; pulse 100; temperature 99½; breathing 22. Treatment continued. Warm water injections.

June 1st. Pulse 104; temperature 101°; breathing 25; vomiting less frequent; not much pain; somewhat under the influence of morphia; still vomiting occasionally; lies on his back with his legs stretched straight down; can't be turned on either side or his knees flexed without causing great pain and vomiting.

June 2d, 3d, 4th and 5th. Condition much the same. Pulse ranging from 98 to 108; temperature from 101° to 103°; still having paroxysms of pain and vomiting.

June 6th. Bowels move freely; discharge very offensive, tinged with blood; pulse 104; temperature 102°; tongue dry and coated brown; swelling but little abated, if any. Treatment, morphia increased to ½ grain. Turpentine, glycerine and sodium mixture applied over the bowels with cotton; ice and milk in small quanties often repeated.

June 7th. Consultation; Drs. Ritchey, Davis, Egbert and Conners, of Oil City; pulse 100; temperature 102°; breathing 30; perspiring freely; tympanites increasing; stomach distended; ribs pressed out on both sides; lies straight on his back; legs stretched; head low; tongue dry; great thirst. Treatment, turpentine

and a mixture of quinine, nux vomica and aromatic sulp. acid; morphia increased to ½ grain doses hypodermically every four hours.

June 8th, 9th, 10th, and 11th. Much in the same condition; temperature and circulation vary but little; vomiting occasionally; kept comfortable under the influence of the anodyne; bowels moving; kidneys acting freely; tympanites increasing. Treatment continued.

June 12th. Patient much in same condition; urine examined; slight acid reaction; otherwise healthy.

June 13th. Consultation, Dr. Snowden, of Franklin; not much change; swelling increasing; circulation, temperature and breathing about the same.

June 14th. Consultation, Dr. Arters, of Oil City; ribs distended on both sides, more on the left; diaphragm pushed up; lungs crowded; heart misplaced; apex beating two inches above nipple; difficult breathing; says he "will burst."

June 15th. Stercoraceous vomiting, throwing up large quantities of fecal matter; pulse 110, temperature normal, breathing 30.

June 16th. Consultation, Drs. Ritchey, Davis and Coope; patient evidently sinking; pulse 120; temperature below normal; breathing 40; nails blue, skin dark, extremities cold; says he is dying; asks me to cut him open."

Passed a minimum sized trocar and canula in median line below navel; large quantity of gas escapes, with strong fecal odor, followed by near a quart of purulent serum; patient much relieved; says he will get well. Left the canula in until the next day.

June 17th. Patient much better. Removed the canula; bowels moving freely; takes milk without vomiting; abdomen very little enlarged.

June 18th. Abdomen distended again with gas. Introduced a large trocar and canula; a good deal of gas escaped, but very little serum. Attached the aspirator pump and pumped into the cavity a quart of ten per cent. carbolized water. Repeated this two or three times, thoroughly washing out the cavity.

June 19th, 20th and 21st. Patient improving, but considerable diarrhœa, which was controlled with bismuth and tannin.

June 22d, 23d and 24th. Convalescing slowly.

July 6th. Forty days from the time of receiving the injury fully recovered, so as to be able to be sent home in a carriage, ten miles in the country. Now I have given you a history of the case and treatment. I have not given any opinion as to what the particular lesion was. Was it intussusception, or some one of the many internal hernias? Why did the patient assume the position of low head and legs stretched straight down, which position he kept through the whole course of his disease?

That the material vomited on the 15th day was fecal matter, all who were present will attest.

That the gas and purulent serum discharged by the trocar and canula had a strong fecal odor was evident to all of us.

All the medical gentlemen who saw the patient agreed that there was traumatic peritoneal inflammation. But as to the particular lesion which caused it, the question was undecided, and as we were cheated out of the post-mortem, it will remain a mystery unless some of your numerous readers will inform us.

Oil City, Pa. T. C. McCULLOCH.

News and Miscellany.

Society of Hygiene in Madrid.

On the 23d of last April, the King of Spain, accompanied by several Ministers of State, inaugurated the new Society of Hygiene in Madrid. Simultaneously the first number of the Society's Journal, the *Boletin de Higiene*, appeared. The object of the journal, as its name imports, is to keep its readers well abreast of all that is newest and most valuable in sanitary science.

Poisoning from Red Stockings.

Dr. J. Woodland writes to the *Lancet* that, having had his attention called to several cases of great irritation of the feet and legs, causing small pustules to arise and the skin to subsequently exfoliate, and suspicion being fastened upon red stockings which the patients wore, he carefully analyzed them. He found a tin salt which is used as a mordant in fixing the dye. He succeeded in obtaining as much as 22.3 grains of this metal in the form of the dioxide, and as each time the articles are washed the tin salt is rendered more easily soluble, the acid excretions from the feet attack the tin oxide, thus forming an irritating fluid.

Rusty Surgical Instruments.

Apropos of this unpardonable practice, which is still occasionally observed even among good surgeons, the *Lancet* says:—

In a highly sensational and unduly colored sketch, a writer has described in *Knowledge* a case of ascites, to which, some years ago, he called in "the great master of British surgery, Sir Rusty Poyntz," who, on being requested to tap the patient, produced for the purpose a trocar with dull point, rusty sides, and an ill fitting canula, and, in spite of protest, insisted on using it, pleading, "It don't signify, you know." We cannot pretend to dispute the bare facts of the case, but we may fearlessly assert that no "master of British surgery," great or small, would to-day be found who would perpetrate such a cruelty. But yet there may be quite room even now for a word of warning as to the importance not only of absolutely clean, but of very sharp-cutting instruments. Where anæsthesia is not employed the amount of pain saved by using a knife of the greatest attainable keenness is very great, while in all cases alike, attention to this particular is one of the requisites of the successful surgeon who would obtain speedy healing of wounds. It is not an unknown thing to see two or even more incisions made before skin is divided, and the result must of necessity be a partially bruised and irregular edge, the healing of which is in exactly that measure interfered with.

Comparative Size of Drops.

The following table approximately gives the average number of drops in a *fluid drachm* of the various classes of U. S. P. preparations:—

Sulphuric ether	174	Mixtures	89
Fluid extracts	141	Vinegars	77
Spirits	141	Syrups not containing fluid extracts	60
Tinctures	136	Solutions (1 exception)	66
Volatile oils	131	Diluted acids	61
Oleo-resins	124	EXCEPTIONS:	
Acids (3 exceptions)	123	Sol. nitrate of mercury	131
Wines	106	Nitro-muriatic acid	76
Fixed oils	103	Muriatic acid	70
Syrups containing fluid extracts	97	Sulphurous acid	59

Flowers for Hospitals.

We are glad to note the "*flower service*" (as it is termed) which obtains in England. On a recent day the church of St. John, at Paddington, was the scene of one these "*flower services*," when the chancel was one mass of flowers and fruit, the offerings of children to the sick in the hospitals. This is a most excellent example to follow in this country.

Vivisection.

The following communication to the *Lancet* of a recent date is interesting, on account of the violent anti-vivisection excitement that is now agitating England:—

SIR:—In the *Times* of this morning there is an account of the State ball given by command of Her Majesty, at Buckingham Palace, last evening. Among other announcements of the dresses worn by Royal and noble ladies is the following: "Her Royal Highness, Princess Christian of Schleswig-Holstein, wore a dress of white satin and tulle, trimmed with bunches of pale pink roses and *humming birds*. I, of course, was not present, but I can imagine the panic that Her Royal Highness's appearance must have caused among the sympathizers with the anti-vivisection agitation! Surely some of them must have been ready to swoon away at such a parade of slaughter—such a holocaust at the shrine of the Goddess of Fashion.

Pen Picture of Pasteur.

M. Pasteur is described as a man of low stature and powerful frame—spare, angular, and weather beaten. Of humble origin, the son of hard-working parents, he bears the indications of his race and hereditary bias in every lineament of his countenance and every movement of his well knit, muscular physique. He is a man of few words, abrupt but clear in his sentences, logical, and to the point. His style of speaking is what would be ordinarily called argumentative; his voice is clear and distinct, but unemotional, and his gestures are quick and impetuous, although wanting in the elegance that arises from early training. It is a very curious fact, but one that finds its correlative in the lives of Wallace, the celebrated British naturalist, and Professor Crookes, the great master in physics, that, although his fame rests upon minute researches of the most material complexion, M. Pasteur is an ardent and steadfast believer in spiritualism. He takes no interest in the positivist doctrines of Comte or in the evolution theories of Herbert Spencer, who, he thinks, overlook the central fact of the universe, infinity. Like M. Littre, he holds that without a spiritual link the human family would fall to pieces and nations degenerate into barbarian hordes. In his own neighborhood, M. Pasteur is a man of political and social weight, and in his own house he is the soul of genial and pleasant hospitality.

Items.

Errata.—On page 213, first column, line 23 from bottom, for *water* read *alcohol*.

—Dr. J. W. McLane, of New York, does not place much reliance on a skimmed milk diet for albuminuria.

—"What is the action of disinfectants?" was asked of a medical student. "They smell so bad that people open the door and fresh air gets in," was the reply."

—"I wouldn't be in Egypt," said Mrs. McGill, last week, "for all the wealth of Creosote." Seeing a look of astonishment in the faces of her auditors, she added: "Creosote, you know, was an old Roman god, and everything he touched turned into gold."

—Dr. Riembault, in a communication made to the Paris Academy of Medicine, states that he has made a series of researches with reference to "miners' anæmia," and he believes that this affection is due to the presence of a worm of the filaria species, and not to that of the *ankylostomum duodenale*, as asserted by M. Perroncito, of Turin.

MARRIAGES.

HUTTON—WOODWORTH.—At Fergus Falls, Minn., July 11th, 1882, Dr. Terry J. Hutton and Miss Hattie J. Woodworth.

CHAMPLIN—SHERWOOD.—In Syracuse, N. Y., July 12th, by Rev. Henry W. Sherwood, Henry W. Champlin, M.D., of Chelsea, Mich., formerly of Orwell, Pa., and Delia A. Sherwood, of Owego, N. Y.

LOVELAND—STERLING.—On Thursday, Aug. 3d, 1882, at the Calvary Presbyterian Church, West Brighton, Staten Island, by the Rev. Theo. A. Leggett, Dr. T. O. Loveland, of Boston, and Bessie May, daughter of Erasmus Sterling.

McCLELLAN—YOST.—On Tuesday evening, Aug. 1st, by the Rev. Lawrence Guerin, at the residence of the bride's parents, 233 Garrard street, Covington, Ky., Dr. James S McClellan, of Bellaire, O., and Miss Lillie V. Yost.

WEEKS—UMSTEAD.—On Wednesday, Aug. 2d, 1882, by Rev. F. C. Pearson, Dr. Albert Weeks, of Phœnixville, and Miss Mary E. Umstead, of Pottstown, Montgomery county, Pa.

DEATHS.

DE GRAW.—At San Francisco, Cal., July 26th, in the 46th year of his age, Dr. Charles S. De Graw, of New Jersey, formerly Assistant Surgeon, U. S. A.

JACOBY.—On the 7th inst., at Sumneytown, Montgomery county, Pa., Henry S. Jacoby, M.D., son of the late Daniel Jacoby.

LOMBARD—In Colebrook, N. H., July 8th, E. D. Lombard, M.D., aged 47 years.

MUSSEY.—In Cincinnati, O., Dr. Wm. H. Mussey, Tuesday, Aug. 1st, in his 64th year, of apoplexy.

SOUTHWORTH.—In New York, on Tuesday, Aug. 15th, Edward Southworth, M.D., in the 24th year of his age.